AECOM
888 SW 5th Avenue, Suite 600
Portland, OR 97204
aecom.com

June 26, 2025

Mr. Christer Loftenius
Washington State Department of
Ecology
Toxics Cleanup Program
4601 North Monroe Street
Spokane, WA
clof461@ecy.wa.gov

RE: Progress Report: January 1 through June 30, 2025
Chevron Pipe Line Company Pasco Bulk Terminal
Ecology Cleanup Site ID: 4867
Ecology Facility Site ID: 55763995
Agreed Order No. DE 21664

Dear Mr. Loftenius:

This Progress Report has been prepared on behalf of Tesoro Logistics Operations LLC (Tesoro) to document the cleanup actions conducted from January 1 through June 30, 2025, at the Chevron Pipe Line Company Pasco Bulk Terminal (herein referred to as the Site). This Progress Report was prepared in accordance with the requirements of Section VI of the Agreed Order Number (No.) DE 21664 (Order) dated April 11, 2023, between the Washington State Department of Ecology (Ecology) and Tesoro.

If you have any questions regarding this progress report, please contact the AECOM Project Manager, Nicky Moody, at (503) 969-6310.

Yours sincerely,
AECOM Technical Services, Inc.

Nicky Moody
Project Manager
AECOM
M: 503.969.6310
E: nicky.moody@aecom.com

cc: Nick Acklam, Washington State Department of Ecology, nack461@ecy.wa.gov
Kyle Waldron, MPC, kawaldron@marathonpetroleum.com
Michael Mungas, MPL, MMungas@marathonpetroleum.com
Dan Andersen, MPL, DJAnderson2@marathonpetroleum.com

Chevron Pipe Line Company Pasco Bulk Terminal
Agreed Order No. DE 21664
Progress Report: January 1 through June 30, 2025

This Progress Report has been prepared by AECOM Technical Services, Inc. (AECOM) for the Washington Department of Ecology (Ecology) Cleanup Site named "Chevron Pipe Line Company Pasco Bulk Terminal" (herein referred to as the Site) to document compliance monitoring in accordance with the requirements of Agreed Order Number (No.) DE 21664 dated April 11, 2023 (Order) between Ecology and Tesoro Logistics Operations LLC (Tesoro) (an indirect subsidiary of Marathon Petroleum Corporation).[1] The Site is listed in Ecology's Integrated Site Information System with the following information:

- Facility Site Name: Chevron Pipe Line Company Pasco Bulk Fuel Terminal
- Facility Address: 2900 Sacajawea Park Road, Pasco, Washington 99301, Franklin County
- Facility Site Identification Number (FSID): 55763995
- Cleanup Site Identification Number (CSID): 4867

Site documents are available on Ecology's website at:
https://apps.ecology.wa.gov/cleanupsearch/site/4867

The Site, which is defined with the **red line** on Figures 1 through 3, is located within the boundary of the larger Pasco Terminal, which is owned and operated by Tesoro; the Pasco Terminal is here in referred to as the Terminal. The Chevron Pipe Line Company (CPL) initially owned and operated the Terminal since its construction in 1950 until Tesoro purchased the Terminal in June 2013.

As stated in the Order, the *Cleanup Action Plan* (CAP)[2] sets cleanup standards and selects the cleanup action that meets the cleanup standards for the Site. The CAP indicates that the Ecology-selected cleanup action for the Site is institutional controls (ICs), monitored natural attenuation (MNA), and enhanced bioremediation using oxygen-releasing compounds (ORCs). As described in the *Compliance Monitoring Plan* (CMP)[3] and *Engineering Design Report* (EDR)[4], the purpose of semi-annual monitoring at the Site is to monitor indicator hazardous substances (IHSs) for the effectiveness of MNA and enhanced bioremediation.

IHSs from the CAP include benzene, toluene, ethylbenzene, and total xylenes (BTEX), naphthalene, and diesel- and motor oil-range total petroleum hydrocarbons (TPH-d and TPH-o). Natural attenuation (NA) parameters, including ferrous iron, nitrate, alkalinity, sulfate, methane, dissolved manganese, dissolved oxygen (DO), oxidation reduction potential (ORP), and pH, will be used to evaluate the effectiveness of the cleanup action at the Site.

The CAP, CMP, and EDR provide the cleanup levels for the Site IHSs (Table 1 of the CMP). The *Sampling and Analysis Plan* (SAP) (Appendix A of the CMP, Table A-4) provides a full list of analytical parameters.

The CMP provides additional information describing groundwater monitoring locations, methods, frequency, analytical parameters, and reporting obligations required to ensure that the cleanup objectives established in the CAP are met. The performance monitoring schedule is also summarized in the CMP and listed below:

- Performance monitoring will begin with semi-annual events during the spring (first semi-annual [1SA]) and fall (second semi-annual [2SA]) of 2023 before ORC deployment.

[1] Ecology, 2023b. Agreed Order No. DE 21664. In the Matter of Remedial Action by Tesoro Logistic Operation LLC. April
[2] Ecology, 2023a. *Final Corrective Action Plan*. Chevron Pipe Line Co. Pasco Bulk Terminal. March.
[3] AECOM, 2024a. *Compliance Monitoring Plan.* Chevron Pipe Line Company Pasco Bulk Terminal. January.
[4] AECOM, 2024b. *Engineering Design Report.* Chevron Pipe Line Company Pasco Bulk Terminal. January

- Performance monitoring during ORC deployment starting in 2024 will continue with semi-annual events during spring and fall (Table 1) until the IHS concentrations are below the cleanup levels for two sequential events.
- Performance monitoring will then continue without ORC deployment for one additional year before transitioning to confirmation monitoring.

The EDR provides the conceptual design for the implementation of the enhanced bioremediation alternative with the deployment and retrieval of the ORC product in source area compliance monitoring wells. The *Operations and Maintenance Plan* (O&M Plan) (Appendix B of the EDR) includes the procedures for handling of the ORC product and the procedures for the inspection and maintenance of the compliance monitoring wells, dedicated bladder pumps for sampling, and hangers used for the deployment of the ORC product.

Per Section VI of the Order, this Progress Report includes the following six elements:

1. A list of on-Site activities conducted during the last six months.
2. Detailed description of any deviations from required tasks not otherwise documented in project plans or amendment requests.
3. Description of all deviations from the Scope of Work and Schedule (Exhibit C) of the Order during the current six months and any planned deviations in the upcoming six months.
4. For any deviations in the schedule, a plan for recovering lost time and maintaining compliance with the schedule.
5. All raw data (including laboratory analysis) received during the previous period (if not previously submitted to Ecology), together with a detailed description of the underlying samples collected.
6. A list of deliverables for the upcoming six months.

1. On-Site Activities

This section includes a summary of on-site activities conducted during this reporting period:

1.1 Well Redevelopment

Construction details for the Site's compliance monitoring wells are provided in Table A-5 of the 2024 *Sampling and Analysis Plan* (Appendix A to the *Compliance Monitoring Plan).*[5] An updated version of Table A-5 is included with the field forms as Attachment A.

Monitoring wells MW-02 through MW-04 were originally installed in 1983; however, the well logs are no longer available. Consequently, the well depths and screen intervals for those wells were estimated in the 2011 *Remedial Investigation/Feasibility Study Report* (2011 RI/FS).[6]

To support the development of the *Compliance Monitoring Plan*, total depths for MW-02 and MW-03 were re-measured in April 2023 to verify the saturated screen intervals for the proposed ORC deployment. The re-measurement revealed that MW-02 was 7 feet shallower and MW-03 was 2 feet shallower than previously reported in the 2011 RI/FS. Given the age of the wells (over 40 years) and the potential accumulation of sediment, AECOM recommended the redevelopment of both MW-02 and MW-03 prior to the 1SA event.

[5] AECOM, 2024. *Compliance Monitoring Plan.* Chevron Pipe Line Company Pasco Bulk Terminal. January 31.

[6] URS, 2011. *Remedial Investigation/Feasibility Study Report.* NWTC Pasco Terminal. Pasco, Washington. September 29.

On February 19 and 20, 2025, Holt Services, Inc, under supervision by an AECOM geologist, performed well redevelopment at MW-02 and MW-03. The wells were redeveloped by surging and purging the screen sections and bailing out accumulated sediments from the bottom of the casings. A total of 5 to 10 well volumes were removed from each well during the redevelopment. The purge water was disposed of in the terminal system, while sediments were collected in a 5-gallon bucket for management as investigation-derived waste. Additionally, a 3-foot-long disposable bailer was recovered from the bottom of MW-03. The recovered bailer was disposed of as general municipal waste.

Post re-development total depth measurements showed that 0.22 feet of sediment had been removed from MW-02. In MW-03, after removal of the bailer and additional sediment, the total depth increased by 1.98 feet. The updated information is included in red on Table A-5 in Attachment A.

1.2 1st Semi-Annual Groundwater Event

This section summarizes the on-site activities for the 1SA event:

- Between April 14 and April 18, 2025, AECOM conducted the 1SA event, as outlined in Table 1.
    - Depth-to-groundwater (DTW) measurements and groundwater samples were collected at 19 compliance monitoring wells (MW-02 through MW-04, MW-06 through MW-08, MW-10 through MW-12, and MW-14 through MW-23). AECOM also inspected the 19 compliance monitoring wells at the beginning of the event.
    - Additionally, DTW measurements were collected at two Tidewater monitoring wells (AR-11 and TMW-05).
    - Field quality assurance and quality control samples for this reporting period included:
        - Field duplicate sample, MW-DUP-04-20250415, which was collected at MW-04;
        - Field blank sample, identified as “Field Blank”, which was collected while working in the tank farm; and
        - Three trip blank samples, TB-01, TB-02, and TB-03.
- The 20 groundwater samples (19 primary and one field duplicate), one field blank, and three trip blanks were submitted to Pace Analytical National, LLC located in Mount Juliet, Tennessee.
- The primary, field duplicate, and field blank samples were submitted for analysis of the IHSs (listed below).
    - Five volatile organic compounds (VOCs): benzene, toluene, ethylbenzene, total xylenes (BTEX) and naphthalene by US Environmental Protection Agency (EPA) Method 8260D
    - Total petroleum hydrocarbons (TPHs) by Ecology Methods NWTPH-Gx (gasoline-range TPH) and NWTPH-Dx (diesel-range and heavy oil-range TPH)
- The primary and field duplicate samples were submitted for analysis of the natural attenuation parameters (listed below).
    - Dissolved gases (methane, ethane, and ethene) by EPA Method RSK-175
    - Dissolved manganese by EPA Method 6010D
    - Sulfate by EPA Method 300.0
    - Total alkalinity by Standard Method (SM) 2320B-2011
- The trip blank samples were submitted for analysis of select VOCs by EPA Method 8260D.

1.3 ORC Deployment

On April 18 2025, AECOM set up the ORC hangers and deployed the ORC canisters in accordance with the EDR. Table A below lists the number of ORC sleeves deployed in each of the six compliance monitoring wells. Notably, the redevelopment of MW-02 allowed for deployment of a second ORC canister in that well. However, due to the cumulative weight of the three ORC canisters already deployed in MW-03, adding another canister was not feasible.

Table A. PVC Canister Deployment Summary - April 2025

Well ID	MW-02	MW-03	MW-11	MW-12	MW-17	MW-19
Measured Total Well Depth (Table A-5) (feet btoc)	79.60	97.40	84.60	85.11	83.47	89.80
Well Diameter (inches)	4	4	2	2	2	2
PVC Canister Diameter (inches)	3.50	3.50	1.75	1.75	1.75	1.75
# of ORC Sleeves Deployed (1 per PVC Canister)	2	3	1	1	1	2
1SA 2025 Measured Water Column Height (feet)	8.59	16.96	5.37	5.72	5.33	7.38
PVC Canister Assembly Length (feet)	6.90	10.50	3.10	3.10	3.10	6.30
Cable Modifier Length (feet)	7.70	11.30	3.90	3.90	3.90	7.09

2. Deviations from Required Tasks

This section includes a detailed description of any deviations from required tasks not otherwise documented in project plans or amendment requests.

- Not Applicable: No deviations from required tasks occurred during this reporting period, and none are anticipated for the upcoming reporting period.

3. Deviations from the Agreed Order

This section includes a description of all deviations from the Scope of Work and Schedule (Exhibit C) of the Order during the current six months and any planned deviations in the upcoming six months.

- Not Applicable: No deviations from the Order occurred during this period, and none are anticipated for the upcoming period.

4. Deviations in Schedule

This section lists any deviations in the schedule, a plan for recovering lost time and maintaining compliance with the schedule.

- Not Applicable: No schedule deviations occurred during this period, and none are anticipated for the upcoming reporting period. An annotated schedule from Exhibit C of the Order is provided below on Table B.

Table B. Annotated Agreed Order Schedule

Tasks/Deliverables	Deadlines	Schedule Status	
Tesoro submits draft EDR, O&M Plan, and CMP	90 days following the effective date of the Agreed Order	July 10, 2023	Task Complete
Tesoro submits final EDR, O&M Plan, and CMP	30 days after receipt of Ecology's written comments on the drafts	January 31, 2024	Task Complete
Tesoro notifies Ecology that ORC socks are ready to be installed	30 days after Ecology approval of EDR and O&M Plan	February 28, 2024	Task Complete
Tesoro begins cleanup action	As described in EDR, but no later than April 28, 2023	April 28, 2023	Task Complete
Tesoro notifies Ecology in advance of any sample collection or work activity at the Site	7 days in advance of fieldwork	Notified Ecology of the 1SA event on April 4, 2025	On-going
Tesoro submits progress reports	Within 60 days of the last day of the previous six-month period	--	On-going
Draft Environmental Covenant (EC)	60 days after ORC socks are deployed for the first time	May 13, 2024	Task Complete
After approval by Ecology, Tesoro records the final EC with the office of the Franklin County Auditor and provides Ecology with the recorded EC	Within 30 days of the recording date of the EC	Recorded and provided to Ecology on April 17, 2025	Task Complete
Tesoro submits draft Cleanup Action Report	90 days after the ORC treatment is complete	--	--
Tesoro submits Final Cleanup Action Report	30 days after Tesoro receives Ecology's written comments on draft Cleanup Action Report	--	--

Notes:
-- = date pending as set by earlier task/deliverable

5. Raw Data

This section includes all raw data (including laboratory analyses) received during the previous period (if not previously submitted to Ecology), together with a detailed description of the underlying samples collected.

Field forms and data generated during the reporting period are listed below.

- Groundwater level form, groundwater sampling logs, and the ORC deployment form (Attachment A, Field Forms)

- Tabulated DTW measurements, calculated groundwater elevations, and analytical results for this reporting period (Table 2 and in Table B1 in Attachment B with the 2014 to 2025 data)
- Tabulated field (pH, temperature, conductivity, dissolved oxygen, and oxidation-reduction potential) and natural attenuation parameter results for this reporting period (Table 3 and in Table B2 in Attachment B with the 2014 to 2025 data)
- Laboratory report and chain-of-custody form (Attachment C)

A summary data quality review was performed on the 20 groundwater samples (19 primary and one field duplicate), one field blank, and three trip blanks collected in April 2025 (Attachment D, Data Validation Report).

6. Planned Deliverables

This section includes a list of deliverables for the upcoming six months.

- The raw data (groundwater level elevations and laboratory analytical results including data qualifiers added during the data quality review) for this reporting period will be submitted online in a format compatible with Ecology's Environmental Information Management (EIM) System, per Ecology Policy 840 following submission of this Progress Report to Ecology.
- In compliance with the Order, the next progress report for reporting period July to December 2025 will be issued by March 1, 2026. Note: this report will be issued as an expanded Annual Progress Report, which will evaluate data collected during both 2025 semi-annual events.

Attachments

Figures

Figure 1. Site Vicinity Map
Figure 2. Site Map and Compliance Monitoring Well Network
Figure 3. Groundwater Elevation Contour Map – April 2025

Tables

Table 1. Compliance Monitoring Well and Initial Performance Monitoring Frequency – 2024+
Table 2. Groundwater Elevations and Analytical Results – 2025
Table 3. Field Parameters and Natural Attenuation Results – 2025

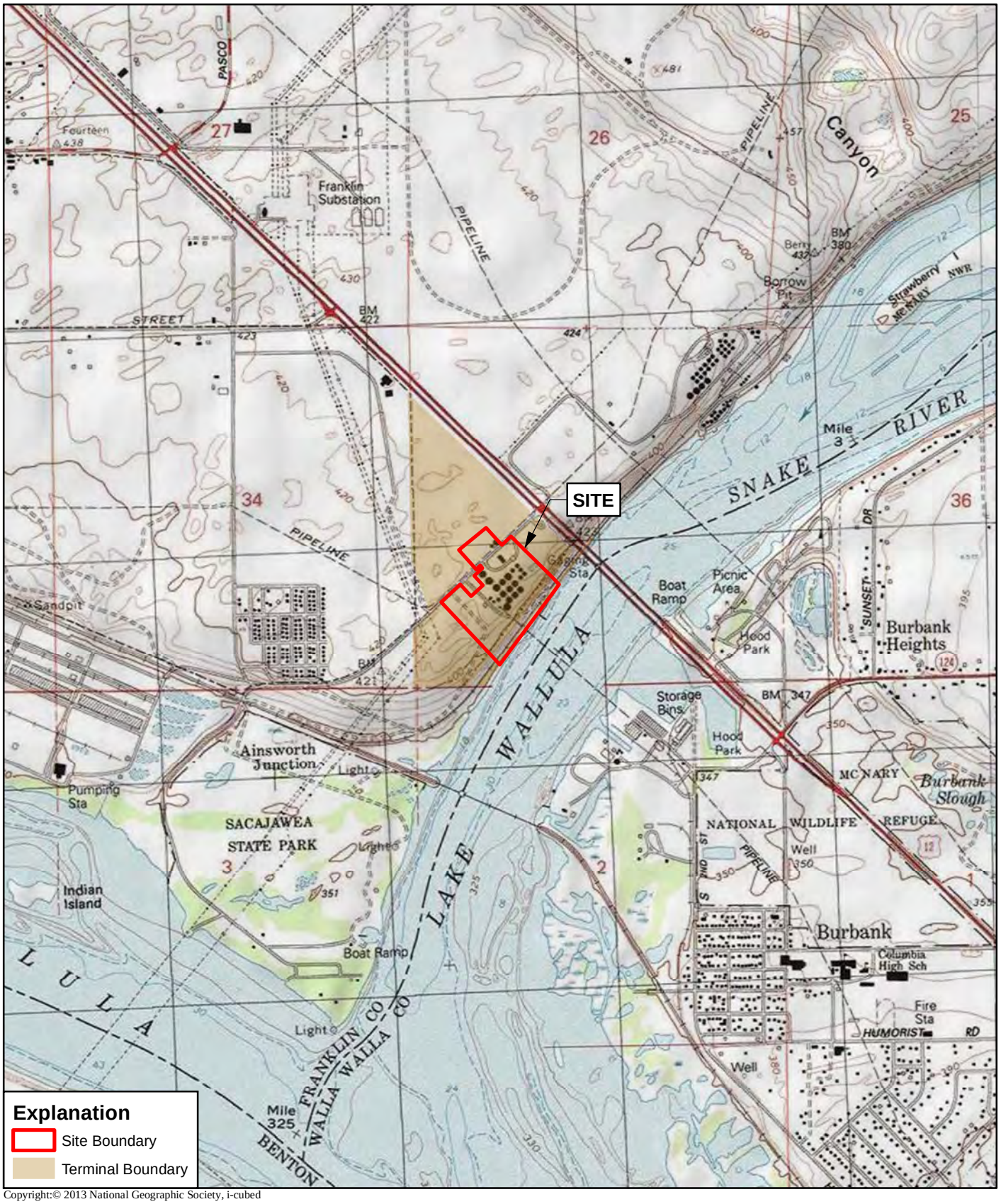
Attachments

Attachment A. Revised Table A-5 and Field Forms:
- Table A-5. Well Construction and Bladder Pump Information
- ORC Deployment Form
- Groundwater Level Form
- Groundwater Sampling Log

Attachment B. Groundwater Data and Analytical Results – 2014-2025:
- Table B1. Groundwater Elevations and Analytical Results – 2014-2025
- Table B2. Field Parameters and Natural Attenuation Results – 2014-2025

Attachment C. Laboratory Report and Chain-of-Custody Form
Attachment D. Data Validation Report

FIGURES



1,000 0 1,000 2,000

SCALE IN FEET

AECOM

SITE VICINITY MAP

TESORO LOGISTICS OPERATIONS LLC
CHEVRON PIPE LINE COMPANY PASCO BULK TERMINAL
PASCO, WASHINGTON

60722666

FIGURE 1

K:\Tesoro PascoMXD\2023 CMP\Fig 1 Site Viciniy Map.mxd

Explanation

- Compliance Monitoring Well
- Compliance Monitoring Wells Proposed for ORC Deployment
- Tidewater Monitoring Well
- Vapor Extraction Well

Previous Spill
(Size of circle indicates volume released)

- Diesel
- Gasoline
- Jet Fuel

600 — Number of barrels in spill
12/20/78 — Date of spill

- BNSF Railroad
- BNSF Right of Way
- Excavation Area
- Terminal Boundary
- Site Boundary
- Tidewater Site Boundary

Areas of Concern

- North Area
- Northern Tank Area
- Southern Tank Area

Imagery Source: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

K:\Tesoro_PascoMXD\2023_CMP\Fig 2 Site Plan and Compliance MW Network.mxd

AECOM

60722666

SITE MAP AND COMPLIANCE MONITORING WELL NETWORK

TESORO LOGISTICS OPERATIONS LLC
CHEVRON PIPE LINE COMPANY PASCO BULK TERMINAL
PASCO, WASHINGTON

FIGURE 2

AR-11(TW)
344.37

Sacajawea Park Rd

MW-05(TW)
344.32

MW-18
344.29

MW-20
344.31

North Area

Northern
Tank Area

MW-17
344.26

MW-19
344.28

MW-21
344.23

344.25

MW-23
344.15

Southern Tank Area

MW-03
344.30

MW-12

MW-13

MW-14
344.08

MW-02
344.27

MW-11

MW-1

344.00

MW-22
344.11

RW-1

MW-07
344.20

MW-10
344.21

343.75

MW-16
343.84

MW-04
343.79

MW-08
344.06

343.50

343.25

0.0018

343.00

Riverbank
Area

MW-15
342.45

342.75

1987 Cleanup
Action

MW-06
342.30

342.50

MW-5

MW-9

Snake River
(Lake Wallula)

342.25

N

75 0 75 150
SCALE IN FEET

Explanation

- Monitoring Well
- Tidewater Monitoring Well
- Abandoned or Destroyed Well
- 344.15 Groundwater Elevation
- 0.0018 Groundwater Flow Direction and Gradient
- Groundwater Elevation Contour
- BNSF Railroad
- BNSF Right of Way
- Site Boundary
- Tidewater Site Boundary

Areas of Concern

- North Area
- Northern Tank Area
- Southern Tank Area

Note: Measurements collected April 2025; due to inconsistencies during gauging and sampling, MW-11 and MW-12 measurements were not used in contouring.

Imagery Source: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

AECOM

60746115

GROUNDWATER ELEVATION CONTOUR MAP - APRIL 2025

TESORO LOGISTICS OPERATIONS, LLC
CHEVRON PIPE LINE COMPANY BULK FUEL TERMINAL
PASCO, WASHINGTON

FIGURE 3

TABLES

Table 1. Compliance Monitoring Well and Initial Performance Monitoring Frequency - 2024+

Location / Well Type	Well ID	Monitoring and Sampling Program											
						IHS - Lab Analysis		Natural Attenuation Field Analysis		Natural Attenuation Lab Analysis			
		Collect GW Level Measurements (During both SA Events)	**Collect Samples** (During 1st SA Event in Spring)	**Deploy ORC Sleeves** (Over 6 months in Summer between two Events)	**Collect Samples** (During 2nd SA Event in Fall)	**TPH-g, TPH-d, & TPH-o** (NWTPH-Gx / NWTPH-Dx)	**BTEX+N** (EPA 8260D)	**Field Parameters** (pH, Cond, DO, Temp, & ORP)	**Ferrous Iron & Nitrate** (Field Test Kits)	**Alkalinity** (SM 2320B)	**Sulfate** (anions) EPA 300)	**Methane** (dissolved gases) (RSKSOP-175)	**Dissolved Manganese** (lab-filtered) (EPA 6010B)
Site Compliance Monitoring Wells	MW-02	X	X	X	--	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only
	MW-03*1SA	X	X	X	--	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only
	MW-04	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-06*2SA	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-07	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-08	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-10	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-11	X	X	X	--	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only
	MW-12	X	X	X	--	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only
	MW-14	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-15	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-16	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-17	X	X	X	--	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only
	MW-18	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-19*1SA	X	X	X	--	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only	1st SA only
	MW-20	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-21	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-22	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
	MW-23	X	X	--	X	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA	1st SA & 2nd SA
Tidewater Site Monitoring Wells	AR-11	X	--	--	--	--	--	--	--	--	--	--	--
	TMW-05	X	--	--	--	--	--	--	--	--	--	--	--

Notes:

MW-XX*1SA = These well locations have been selected as potential sites for one field duplicate and/or extra volume collection for one MS/MSD for the 1st semiannual event (as < 20 primary samples).
MW-XX*2SA = These well locations have been selected as potential sites for one field duplicate and/or extra volume collection for one MS/MSD for the 2nd semiannual event (as < 20 primary samples).

Acronyms:

-- = Not applicable, not available, or not sampled
bgs = below ground surface
BTEX+N = benzene, toluene, ethylbenzene, total xylenes and naphthalene
btoc = below top of casing
Cond = conductivity
DO = dissolved oxygen
EPA = US Environmental Protection Agency
ft = feet
GW = groundwater
IHS = indicator hazardous substance
MW = monitoring well
ORP = oxidation reduction potential
RSKSOP-175 = EPA Procedure RSKSOP-175 (Robert S. Kerr Standard Operating Procedure)
SA = semiannual
SM = Standard Method
TPH = total petroleum hydrocarbons
TPH-d = diesel range hydrocarbons (as analyzed by Northwest Method NWTPH-Dx)
TPH-g = gasoline range hydrocarbons (as analyzed by Northwest Method NWPTH-Gx)
TPH-o = motor oil range hydrocarbons (as analyzed by Northwest Method NWTPH-Dx)
X = collect or deploy as listed for that well

AECOM

Table 2: Groundwater Elevations and Analytical Results - 2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
Cleanup Levels [1]						*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
Units:		*ft NAVD29* [2]	*ft btoc*	*ft NAVD29* [2]	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
Site Wells													
MW-02	4/17/25	417.23	72.96	344.17	0.04	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-03	4/15/25	423.40	79.10	344.16	-1.41	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-04	4/15/25	412.05	68.26	343.73	-0.98	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-06	4/16/25	358.52	16.22	342.23	-0.70	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-07	4/17/25	411.32	67.12	344.06	-0.88	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-08	4/15/25	383.76	39.70	343.98	-0.93	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-10	4/17/25	407.83	63.62	344.10	-0.99	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-11	4/15/25	423.44	79.17	344.64	-0.50	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-12	4/16/25	423.62	79.41	344.05	0.05	100 U	**335**	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-14	4/15/25	421.84	77.76	344.07	-1.33	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-15	4/16/25	358.50	16.05	342.32	-0.86	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-16	4/16/25	370.92	27.08	343.79	-1.02	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-17	4/16/25	424.28	80.02	344.20	-0.03	100 U	**545**	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-18	4/16/25	423.69	79.40	344.25	-1.11	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-19	4/16/25	424.20	79.92	344.22	-0.03	100 U	200 U	250 U	1.00 U	1.00 U	**1.21**	3.00 U	5.00 U
MW-20	4/16/25	426.52	82.21	344.17	-1.19	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-21	4/16/25	426.16	81.93	344.17	-1.13	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-22	4/15/25	420.45	76.34	344.12	-0.99	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-23	4/16/25	421.74	77.59	344.11	-1.04	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
Tidewater Wells													
AR-11	4/14/25	422.62	78.25	344.37	-1.06	-	-	-	-	-	-	-	-
TMW-05	4/14/25	425.02	80.70	344.32	-1.08	-	-	-	-	-	-	-	-

Notes:
Values in **bold** were reported as detected
= Yellow shaded detections exceed the cleanup level
- = not analyzed or sample not collected
(1) The Cleanup Levels are included in Table 1 of the *Compliance Monitoring Plan* (AECOM, 2023).
(2) On February 7, 2019, the wells were resurveyed by Stratton Surveying and Mapping, P.C. MW-20 through MW-23 were surveyed on December 10, 2019. Horizontal datum = Washington State

Acronyms:
µg/L = microgram per liter
btoc - below top of casing
ft = feet
GW = groundwater
J = estimated concentration
NAVD29 = North American Vertical Datum of 1929
TOC = top of casing
TPH-d = total petroleum hydrocarbons, diesel range
TPH-g = total petroleum hydrocarbons, gasoline range
TPH-o = total petroleum hydrocarbons, oil range
U = Analyte not detected above limit shown. Starting with data collected since April 2023, the limit shown is the reporting limit.

Table 3: Field Parameters and Natural Attenuation Results - 2025

Well ID	Well Location (relative to groundwater contaminant plume)	Sample Date	Field Measured Parameters							Laboratory Parameters			
			pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
		Units:	*su*	*µS/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-02	Inside	4/17/25	7.06	853	0.80	15.70	413.9	0.02 U	**>30**	**129**	**274**	**0.0378**	0.0100 U
MW-03	Inside	4/15/25	7.18	701	2.76	17.50	-77.3	**0.12**	**25.1**	**112**	**229**	**0.0211**	0.0100 U
MW-04	Outside	4/15/25	7.58	682	8.30	15.90	-33.9	0.02 U	**8.5**	**119**	**193**	0.0100 U	0.0100 U
MW-06	Outside	4/16/25	7.64	755	9.24	15.30	-31.0	0.02 U	**28.5**	**109**	**159 J**	0.0100 U	0.0100 U
MW-07	Outside	4/17/25	7.52	684	8.04	16.80	-49.2	0.02 U	**23.6**	**118**	**199 J**	0.0100 U	0.0100 U
MW-08	Outside	4/15/25	7.51	689	7.96	16.90	-21.5	0.02 U	**13.7**	**117**	**203**	0.0100 U	0.0100 U
MW-10	Outside	4/17/25	7.55	683	8.12	15.60	-39.5	0.02 U	**8.2**	**120**	**182 J**	0.0100 U	0.0100 U
MW-11	Inside	4/15/25	7.05	972	2.22	17.40	456.4	0.02 U	**28.4**	**108**	**276**	**0.269**	0.0100 U
MW-12	Inside	4/16/25	6.97	1,064	2.55	16.70	415.6	0.02 U	**25.7**	**113 J**	**363 J**	**0.0714**	**0.0187**
MW-14	Outside	4/15/25	7.32	870	6.78	16.30	464.1	0.02 U	**>30**	**119**	**211 J**	0.0100 U	0.0100 U
MW-15	Outside	4/16/25	7.49	695	7.08	16.70	-48.7	0.02 U	**>30**	**117**	**205 J**	0.0100 U	0.0100 U
MW-16	Outside	4/16/25	7.46	696	7.15	17.00	-48.8	0.02 U	**5.9**	**118**	**205 J**	0.0100 U	0.0100 U
MW-17	Inside	4/16/25	6.84	995	5.18	16.40	489.8	**0.02**	**27.1**	**139**	**345 J**	0.0100 U	0.0100 U
MW-18	Outside	4/16/25	7.31	858	8.44	16.40	444.3	0.02 U	**>30**	**125**	**209 J**	0.0100 U	0.0100 U
MW-19	Inside	4/16/25	7.14	968	2.48	17.10	-78.9	0.08 U	**5.2**	250 U	**393 J**	0.0100 U	**0.273**
MW-20	Outside	4/16/25	7.61	688	8.37	17.00	-33.8	0.05 U	**20.9**	**125**	**198 J**	0.0100 U	0.0100 U
MW-21	Outside	4/16/25	7.47	830	8.27	16.30	479.3	0.02 U	**>30**	**128**	**199 J**	0.0100 U	0.0100 U
MW-22	Outside	4/15/25	7.59	677	8.45	16.60	-39.0	**0.06**	**>30**	**122**	**188 J**	0.0100 U	0.0100 U
MW-23	Outside	4/16/25	7.58	690	7.67	16.10	-41.9	0.02 U	**16.6**	**125**	**196**	0.0100 U	0.0100 U

Notes:
Values in bold were reported as detected.
- = not analyzed or sample not collected

Acronyms:
deg C = degrees Celsius
J = estimated concentration
mg/L = milligrams per liter
mS/cm = millisiemens per centimeter
µS/cm = microsiemens per centimeter
mV = millivolts
ORP = Oxidation Reduction Potential
su = Standard Unit
U = analyte not detected above limit shown. Starting with data collected since April 2023, the limit shown is the method reporting limit.

Table A-5. Well Construction and Bladder Pump Information
Chevron Pipe Line Company Bulk Fuel Terminal

Location / Well Type	Well ID	Install Date	Monument Type	Well Diameter	Dedicated Geotech PVC Bladder Pump Model (2)	Depth to Pump Inlet	PSI Setting (3)	Fill-Discharge Cycles from Prior 2 Events	Northing	Easting	TOC Elevation (4)	Ground Surface Elevation (4)(5)	Well Stickup Height	Total Boring Depth	Total Well Depth (Calculated from Survey & Well Logs)	Measured Total Well Depth (June 2019)	Measured Total Well Depth (April 2023)	Measured Total Well Depth Post Well Redevelopment (February 2025)	Post Redevelopment Change	Well Screen Interval		Screen Length	Screen Slot Size
		Units:	--	*inches*	--	*ft btoc*	*PSI*	*Seconds*	*NAD83 (91)*	*NAD83 (91)*	*ft NAVD29*	*ft NAVD29*	*ft*	*ft bgs*	*ft btoc*	*ft btoc*	*ft btoc*	*ft btoc*	*ft*	*ft bgs*	*ft btoc*	*ft*	*inches*
Site Compliance Monitoring Wells	MW-02 (1)	11/1983	SU	4	1.66PVC36	77.0	49	20/10; 10/5	325074.904	2012937.736	417.23	414.49	2.4	77.2*	79.6*	79.45	79.38	79.60	0.22	57 - 77	60 - 80	20	--
	MW-03 (1)	11/1983	SU	4	1.66PVC36	85.0	53	20/10; 20/10	324891.488	2012641.745	423.40	421.02	2.4	94.95	97.3	95.30	95.42	97.40	1.98	75 - 95	77 - 97	20	--
	MW-04 (1)	11/1983	SU	4	1.66PVC36	72.0	46	20/10	324524.487	2012589.193	412.05	409.64	2.4	76.75	79.2	76.87	--	--	--	57 - 77	59 - 79	20	--
	MW-06	11/17/1986	SU	2	1.66PVC18	21.0	21	20-10; 11-9	324734.994	2013094.558	358.52	356.30	2.2	25	25.7	26.92	--	--	--	9 - 24	11 - 26	15	0.020
	MW-07	11/18/1986	SU	2	1.66PVC36	72.0	46	20-10; 20-10	324957.838	2012915.419	411.32	408.94	2.4	79	79.4	78.05	--	--	--	57 - 77	59 - 79	20	0.020
	MW-08	11/25/1986	SU	2	1.66PVC18	44.0	32	20-10	324873.003	2012992.060	383.76	381.30	2.5	56	56.5	55.50	--	--	--	29 - 54	31 - 56	25	0.020
	MW-10	1/6/1989	SU	4	1.66PVC36	68.0	44	20-10	324989.314	2012960.533	407.83	404.97	2.9	78.25	78.9	78.94	--	--	--	55 - 76	58 - 79	21	0.020
	MW-11	1/16/1989	SU	2	1.66PVC36	83.0	52	20-10; 40-20	325029.784	2012834.914	423.44	421.34	2.1	84.5	86.6	84.88	--	--	--	75 - 85	77 - 87	10	0.020
	MW-12	1/17/1989	SU	2	1.66PVC36	83.0	52	40-20; 11-9	324978.468	2012732.605	423.62	421.48	2.1	85	86.6	85.11	--	--	--	33 - 60	35 - 62	27	0.010
																				75 - 85	75 - 87	10	0.010
	MW-14	1/17/1989	SU	2	1.66PVC36	84.0	52	20-10; 10-5	325200.637	2012982.336	421.84	421.11	0.7	82.5	82.7	85.20	--	--	--	28 - 53	28 - 54	26	0.010
																				73 - 82	73 - 83	10	0.010
	MW-15	9/5/2018	SU	2	1.66PVC18	21.0	21	20-10; 12.5-7.5	325086.624	2013364.511	358.50	355.60	2.9	23.5	26.4	25.67	--	--	--	9 - 24	11 - 26	15	0.010
	MW-16	9/6/2018	SU	2	1.66PVC18	31.0	26	20-10; 11-4	325224.955	2013308.089	370.92	367.92	3.0	30	33.0	32.80	--	--	--	20 - 30	23 - 33	10	0.010
	MW-17	9/8/2018	SU	2	1.66PVC36	84.0	52	10-5; 20-10	325342.855	2012893.522	424.28	421.38	2.9	83	85.9	85.40	--	--	--	73 - 83	76 - 86	10	0.010
	MW-18	10/11/2018	Flush	2	1.66PVC36	86.5	53	20-10; 20-10	325471.936	2012640.728	423.69	423.96	-0.3	87	86.7	87.70	--	--	--	72 - 87	72 - 87	15	0.010
	MW-19	10/12/2018	SU	2	1.66PVC36	85.0	53	20-10; 11-9	325539.662	2013058.631	424.20	421.66	2.5	87	89.5	89.80	--	--	--	72 - 87	75 - 90	15	0.010
	MW-20	11/25/2019	SU	2	1.66PVC36	95.0	58	20-10; 20-10	325725.096	2012936.726	426.52	423.32	3.2	99	97.7	--	--	--	--	79 - 94	82 - 97	15	0.010
	MW-21	11/19/2019	SU	2	1.66PVC36	93.0	57	40-20; 10-10	325594.049	2013251.362	426.16	423.43	2.7	93	95.2	--	--	--	--	77 - 92	80 - 95	15	0.010
	MW-22	11/22/2019	SU	2	1.66PVC36	94.0	57	20-10; 10-5	324772.561	2012662.284	420.45	417.59	2.9	95	97.4	--	--	--	--	79 - 94	82 - 97	15	0.010
	MW-23	11/24/2019	Flush	2	1.66PVC36	92.0	56	20-10; 10-5	324916.047	2012515.709	421.74	422.03	-0.3	96	95.2	--	--	--	--	80 - 95	80 - 95	15	0.010
Tidewater Site Monitoring Wells	AR-11	8/10/2000	Flush	2	--	--	--	--	325577.520	2012292.090	422.62	422.87	-0.3	88	87.8	--	--	--	--	73 - 88	73 - 88	15	0.020
	MW-05	3/7/2001	SU	2	--	--	--	--	325294.110	2012422.170	425.02	422.38	2.6	90	92.6	--	--	--	--	75 - 90	77 - 92	15	0.020

Notes:
(1) Boring logs not available. Data obtained from Table 3 of September 2011 Remedial Investigation/Feasibility Study. *MW-02 well depth information from RIFS is not consistent with field measurements; the values for total boring depth/well depth were replaced based on the post well redevelopment total depth measureed in February 2025.
(2) Geotech bladders were deployed in 2019; pump specs: https://www.geotechenv.com/pdf/ground_water_sampling_equipment/geotech_pvc_bladder_pumps.pdf
(3) Required PSI = (0.5 x pump intake depth) + 10 PSI
(4) On February 7 and December 10, 2019, all wells except the Tidewater monitoring wells were resurveyed by Stratton Surveying and Mapping, P.C. using horizontal datum Washington State Plane South Zone North American Datum 1983 (1991) and vertical datum North American Vertical Datum 29.
(5) Ground surface elevations for MW-1 through MW-14 obtained from 2010 survey, ground surface elevations for MW-15 to MW-17 were calculated from stick up heights measured by AECOM in June 2019, ground surface elevations for MW-18 to MW-23 obtained from 2019 survey.

Acronyms:
-- = Not applicable or not available
bgs = below ground surface
btoc = below top of casing
ft = feet
ID = identification
MW = monitoring well
NAVD29 = North American Vertical Datum of 1929
NAVD83 (91) = North American Datum of 1983, as modified in 1991
PSI = pound force per square inch
PVC = polyvinyl chloride
RW = recovery well
SU = stick up
TOC = top of casing
VE = vapor extraction well

ATTACHMENT A

Field Forms

Project Name: MPC Pasco	**Project Manager:** Nicky Mady		**Date:** 4/18/2025
Project Number: 60746115	**Personnel:** Jackson Long, Dietrich Teitjen		

ORS Deployment Instructions:
Canisters are to be installed with 1 ORS sleeve per canister. 4" diameter wells use 4" sleeves. 2" diameter wells use 2" sleeves.
Cable Length is calculated as [Depth to Bottom - Cable Modifier]. If equipment is not available to measure DTB, use the Well Depth provided.
If cable length is less than Maximum DTW, canisters may be partially unsubmerged.
Include notes on where recovered canisters, sleeves, etc. are stored or disposed of, as well as any notable details.
Upload form data to ORS Tracking spreadsheet following completion of site work.

Well	Well Diameter (in)	Well Depth (ft btoc) (Pasco Master Tables 20250224)	Historical Maximum DTW (ft btoc)	Historical average DTW (ft btoc)	Minimum water column (ft)	Average water column (ft)	# of Canisters	Choose 1:	Hanger Length from TOC: (ft)	Measured Canister Assembly Length (ft)	Cable Modifier: (ft) (0.17+(length of canister assembly) + (hangar length))	Measured DTB: (ft btoc)	Measured DTW: (feet btoc)	Water Column Length(feet) (Measured DTB - Measured DTW)	Cable Length (ft) *Instructions	Notes
MW-02	4	79.60	74.52	73.66	5.08	5.94	~~1~~ 2	Retrieved / Deployed	0.63	6.90	4.00 7.7	81.55	72.96	8.59	75.60 71.9 historic ~~73.45~~ measured	1130 Pump pulled, stored/labeled fittings disconnected check ball taped ORC Hanger good.
MW-03	4	97.40	80.60	79.81	16.80	17.59	3	Retrieved / Deployed	0.63	10.5	10.40 11.3	96.06	79.1	16.96	87.00 86.1 historic 84.76 measured	0935 pulled pump deployed ORC pump air and water fittings need replaced, broke. stored/labeled needs check ball ORC Hanger good
MW-11	2	84.60	80.67	79.91	3.93	4.69	1	Retrieved / Deployed	0.63	~~4~~ 3 4.10	4.00 3.9	84.54	79.17	5.37	80.60 80.7 historic 80.64 measured	0950 pulled pump, stored/labeled fittings disconnected check ball taped ORC Hanger good.
MW-12	2	85.11	80.83	80.03	4.28	5.08	1	Retrieved / Deployed	0.63	~~4~~ 3 4.10	4.00 3.9	85.13	79.41	5.72	81.11 81.21 historic 81.23 measured	0915 pulled pump, stored/labeled disconnected fittings of pump needs check ball ORC Hanger deployed.
MW-17	2	83.47	81.50	80.84	1.97	2.63	1	Retrieved / Deployed	0.63	~~4~~ 3 4.10	4.00 3.9	85.35	80.02	5.33	79.47 79.57 historic 81.75 measured	1100 pulled pump, stored/labeled disconnected fittings taped check ball ORC Hanger deployed
MW-19	2	89.80	81.30	80.60	8.50	9.20	2	Retrieved / Deployed	0.62	~~8~~ 6 ~~8.30~~	~~7.19~~ ~~7.09~~	87.3	79.92	7.38	82.61 ~~78.21 or 3~~ ~~80.71 historic~~ 82.71 historic 80.21 measured	1020 pulled pump/stored/labeled Disconnected fittings taped check ball ORC Hanger deployed. cable too long needs shortening next time

AECOM

Table B-1

Well ID	Purpose	Task	Date	Depth to Water (ft br)	Measured By
AR-11	Tidewater Well	2025-Q2-WL	4/14/2025	78.25	Jackson Long@aecom
MW-02	Monitoring Well	2025-Q2-WL	4/14/2025	72.96	Jackson Long@aecom
MW-03	Monitoring Well	2025-Q2-WL	4/14/2025	79.10	Jackson Long@aecom
MW-04	Monitoring Well	2025-Q2-WL	4/14/2025	68.26	Jackson Long@aecom
MW-06	Monitoring Well	2025-Q2-WL	4/14/2025	16.22	Jackson Long@aecom
MW-07	Monitoring Well	2025-Q2-WL	4/14/2025	67.12	Jackson Long@aecom
MW-08	Monitoring Well	2025-Q2-WL	4/14/2025	39.70	Jackson Long@aecom
MW-10	Monitoring Well	2025-Q2-WL	4/14/2025	63.62	Jackson Long@aecom
MW-11	Monitoring Well	2025-Q2-WL	4/14/2025	79.17	Jackson Long@aecom
MW-12	Monitoring Well	2025-Q2-WL	4/14/2025	79.41	Jackson Long@aecom
MW-14	Monitoring Well	2025-Q2-WL	4/14/2025	77.76	Jackson Long@aecom
MW-15	Monitoring Well	2025-Q2-WL	4/14/2025	16.05	Jackson Long@aecom
MW-16	Monitoring Well	2025-Q2-WL	4/14/2025	27.08	Jackson Long@aecom
MW-17	Monitoring Well	2025-Q2-WL	4/14/2025	80.02	Jackson Long@aecom
MW-18	Monitoring Well	2025-Q2-WL	4/14/2025	79.40	Jackson Long@aecom
MW-19	Monitoring Well	2025-Q2-WL	4/14/2025	79.92	Jackson Long@aecom
MW-20	Monitoring Well	2025-Q2-WL	4/14/2025	82.21	Jackson Long@aecom
MW-21	Monitoring Well	2025-Q2-WL	4/14/2025	81.93	Jackson Long@aecom
MW-22	Monitoring Well	2025-Q2-WL	4/14/2025	76.34	Jackson Long@aecom
MW-23	Monitoring Well	2025-Q2-WL	4/14/2025	77.59	Jackson Long@aecom
TMW-05	Tidewater Well	2025-Q2-WL	4/14/2025	80.70	Jackson Long@aecom

*Corrected to equivalent freshwater head when LNAPL present
**DNAPL thickness requires depth to bottom measurement

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-02-20250417	Date:	4/17/2025 9:35:00 AM
Well ID:	MW-02	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Jackson Long
Equipment:	Field param meter: YSI Pro Plus # U115940X WL/int meter: Heron Dipper-T # U118301X		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	4 in
Total Depth:	83.3 ft bgs	Screen Interval:	63.30 - 83.30 ft bgs
SAP Pump Depth:	77 ft btoc		

Water Level			
Date:	4/17/2025 8:29:00 AM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	73.06 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/17/2025 8:45:00 AM	End Date and Time:	4/17/2025 9:30:00 AM
Initial Pump Depth:	77 ft btoc	Final Pump Depth:	77 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	>30 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:50 AM	0.320		15.5	7.22	860	5.07	412.3	38.29	73.10	None	None
8:55 AM	0.320		15.5	7.22	861	1.92	418.0	24.98	73.10		
9:00 AM	0.320		15.6	7.14	858	1.55	420.4	33.50	73.10		
9:05 AM	0.320		15.6	7.08	856	1.39	422.4	30.05	73.10		
9:10 AM	0.320		15.7	7.06	854	1.16	423.5	20.87	73.10		
9:15 AM	0.320		15.7	7.05	854	0.94	422.9	18.25	73.10		
9:20 AM	0.320		15.6	7.05	852	0.84	420.3	14.91	73.10		
9:25 AM	0.320		15.7	7.06	853	0.76	417.2	13.55	73.10		
9:30 AM	0.320	15	15.7	7.06	853	0.80	413.9	12.73	73.10		

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-03-20250415	Date:	4/15/2025 2:55:00 PM
Well ID:	MW-03	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	4 in
Total Depth:	94.95 ft bgs	Screen Interval:	74.95 - 94.95 ft bgs
SAP Pump Depth:	85 ft btoc		

Water Level			
Date:	4/15/2025 1:58:00 PM	Measured Well Depth:	95.40 ft btoc
Is Well Dry?	No	Depth to Water:	79.24 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/15/2025 2:02:00 PM	End Date and Time:	4/15/2025 2:40:00 PM
Initial Pump Depth:	85 ft btoc	Final Pump Depth:	85 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	0.12 mg/L	Nitrate:	25.1 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:05 PM	0.300		17.6	7.76	707	3.86	89.4	81.54	79.28		Clear
2:10 PM	0.300		17.4	7.52	705	2.73	-89.8	79.40	79.28		Clear
2:15 PM	0.300		17.7	7.20	701	2.01	-85.9	100.92	79.28		Clear
2:20 PM	0.300		17.7	7.19	701	2.06	-85.5	98.34	79.28		Clear
2:25 PM	0.300		17.7	7.17	700	2.31	-83.2	88.72	79.28		Clear
2:30 PM	0.300		17.7	7.17	700	2.56	-80.5	85.23	79.28		Clear
2:35 PM	0.300		17.6	7.17	700	2.66	-78.7	84.07	79.28		Clear
2:40 PM	0.300	12	17.5	7.18	701	2.76	-77.3	85.07	79.28		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #: 60722666	
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event: 2025-Q2-GW	

Sample Information			
Sample ID:	MW-04-20250415	Date:	4/15/2025 9:40:00 AM
Well ID:	MW-04	Location Type:	Monitoring Well
Duplicate ID:	MW-04-DUP-20250415	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	76.75 ft bgs	Screen Interval:	56.75 - 76.75 ft bgs
SAP Pump Depth:	72 ft btoc		

Water Level			
Date:	4/15/2025 9:00:00 AM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	68.32 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/15/2025 9:15:00 AM	End Date and Time:	4/15/2025 9:35:00 AM
Initial Pump Depth:	74.75 ft btoc	Final Pump Depth:	74.75 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	8.5 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
9:20 AM	0.175		15.6	7.51	681	8.52	-29.5	78.73	68.31	None	Clear
9:25 AM	0.175		15.6	7.55	682	8.34	-31.0	74.67	68.31		Clear
9:31 AM	0.175		15.6	7.56	681	8.31	-32.9	38.43	68.31		Clear
9:35 AM	0.175	3	15.9	7.58	682	8.30	-33.9	48.58	68.31		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-06-20250416	Date:	4/16/2025 12:20:00 PM
Well ID:	MW-06	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	25 ft bgs	Screen Interval:	8.50 - 23.50 ft bgs
SAP Pump Depth:	21 ft btoc		

Water Level			
Date:	4/16/2025 11:33:00 AM	Measured Well Depth:	25.00 ft btoc
Is Well Dry?	No	Depth to Water:	16.29 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 11:45:00 AM	End Date and Time:	4/16/2025 12:10:00 PM
Initial Pump Depth:	21 ft btoc	Final Pump Depth:	21 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	28.5 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
11:50 AM	0.225		15.4	7.66	751	9.29	-33.8	3.36	16.34		Clear
11:55 AM	0.225		15.3	7.66	751	9.29	-33.0	3.70	16.34		Clear
12:00 PM	0.225		15.3	7.65	756	9.25	-31.9	4.91	16.34		Clear
12:05 PM	0.225		15.4	7.64	755	9.24	-31.1	2.86	16.34		Clear
12:10 PM	0.225	5.625	15.3	7.64	755	9.24	-31.0	3.16	16.34		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-07-20250417	Date:	4/17/2025 11:00:00 AM
Well ID:	MW-07	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	79 ft bgs	Screen Interval:	57.00 - 77.00 ft bgs
SAP Pump Depth:	72 ft btoc		

Water Level			
Date:	4/17/2025 10:10:00 AM	Measured Well Depth:	78.00 ft btoc
Is Well Dry?	No	Depth to Water:	67.26 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/17/2025 10:20:00 AM	End Date and Time:	4/17/2025 10:45:00 AM
Initial Pump Depth:	72 ft btoc	Final Pump Depth:	72 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	23.6 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
10:25 AM	0.250		16.3	7.41	684	8.05	-48.5	3.41	67.31		Clear
10:30 AM	0.250		16.2	7.50	682	8.01	-47.6	3.73	67.31		Clear
10:35 AM	0.250		16.3	7.52	683	8.01	-47.1	3.16	67.31		Clear
10:40 AM	0.250		16.4	7.53	682	8.04	-45.9	3.23	67.31		Clear
10:45 AM	0.250	6.25	16.8	7.52	684	8.04	-49.2	3.18	67.31		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-08-20250415	Date:	4/15/2025 4:55:00 PM
Well ID:	MW-08	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	56 ft bgs	Screen Interval:	29.00 - 54.00 ft bgs
SAP Pump Depth:	44 ft btoc		

Water Level			
Date:	4/15/2025 4:05:00 PM	Measured Well Depth:	55.50 ft btoc
Is Well Dry?	No	Depth to Water:	39.78 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/15/2025 4:20:00 PM	End Date and Time:	4/15/2025 4:45:00 PM
Initial Pump Depth:	44 ft btoc	Final Pump Depth:	Not Recorded
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	0.05 mg/L	Nitrate:	13.7 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
4:25 PM	0.225		17.7	7.54	684	7.99	-44.9	3.62	39.82		Clear
4:30 PM	0.225		17.1	7.51	690	7.94	-26.2	4.36	39.82		Clear
4:35 PM	0.225		16.9	7.51	690	7.94	-22.9	5.93	39.82		Clear
4:40 PM	0.225		16.9	7.51	690	7.94	-21.9	3.87	39.82		Clear
4:45 PM	0.225	5.625	16.9	7.51	689	7.96	-21.5	3.02	39.82		

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-10-20250417	Date:	4/17/2025 9:25:00 AM
Well ID:	MW-10	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	78.25 ft bgs	Screen Interval:	55.00 - 76.00 ft bgs
SAP Pump Depth:	68 ft btoc		

Water Level			
Date:	4/17/2025 8:35:00 AM	Measured Well Depth:	78.00 ft btoc
Is Well Dry?	No	Depth to Water:	63.73 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/17/2025 8:45:00 AM	End Date and Time:	4/17/2025 9:10:00 AM
Initial Pump Depth:	68 ft btoc	Final Pump Depth:	68 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	8.2 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:50 AM	0.225		15.5	7.37	683	8.20	-25.7	2.55	63.78		Clear
8:55 AM	0.225		15.5	7.49	682	8.07	-36.7	2.57	63.78		Clear
9:00 AM	0.225		15.6	7.52	683	8.12	-38.5	2.95	63.78		Clear
9:05 AM	0.225		15.5	7.54	683	8.09	-39.7	2.96	63.78		Clear
9:10 AM	0.225	5.625	15.6	7.55	683	8.12	-39.5	2.98	63.78		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-11-20250415	Date:	4/15/2025 2:50:00 PM
Well ID:	MW-11	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Jackson Long
Equipment:	Field param meter: YSI Pro Plus # U115940X WL/int meter: Heron Dipper-T # U118301X		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	84.5 ft bgs	Screen Interval:	74.50 - 84.50 ft bgs
SAP Pump Depth:	83 ft btoc		

Water Level			
Date:	4/15/2025 2:00:00 PM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	78.80 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/15/2025 2:15:00 PM	End Date and Time:	4/15/2025 2:45:00 PM
Initial Pump Depth:	83 ft btoc	Final Pump Depth:	83 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	28.4 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:20 PM	0.150		18.7	6.60	1115	4.12	436.5	31.60	78.85	None	Clear
2:25 PM	0.150		17.9	6.79	1162	1.99	440.9	24.09	78.85		
2:30 PM	0.150		17.9	6.92	1054	2.00	444.7	25.60	78.85		
2:35 PM	0.150		17.8	6.98	1001	1.94	448.6	25.40	79.23		
2:40 PM	0.150		17.6	7.00	984	2.04	453.6	23.22	79.23		
2:45 PM	0.150	4.5	17.4	7.05	972	2.22	456.4	29.52	79.23		

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-12-20250416	Date:	4/16/2025 4:10:00 PM
Well ID:	MW-12	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Jackson Long
Equipment:	Field param meter: YSI Pro Plus # U115940X WL/int meter: Heron Dipper-T # U118301X		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	85 ft bgs	Screen Interval:	75.00 - 84.50 ft bgs
SAP Pump Depth:	83.5 ft btoc		

Water Level			
Date:	4/16/2025 3:14:00 PM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	79.57 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 3:20:00 PM	End Date and Time:	4/16/2025 4:05:00 PM
Initial Pump Depth:	83 ft btoc	Final Pump Depth:	83 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	25.7 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
3:25 PM	0.270		16.5	6.93	1217	3.81	471.1	62.25	79.70	None	Clear
3:30 PM	0.270		16.3	6.97	1153	2.88	469.6	46.91	79.77		
3:35 PM	0.270		16.4	6.94	1142	2.59	466.9	47.83	79.77		
3:40 PM	0.270		16.5	6.95	1137	2.46	455.7	18.40	79.79		
3:45 PM	0.270		16.7	6.95	1098	2.43	449.6	4.81	79.79		
3:50 PM	0.270		16.7	6.93	1098	2.46	440.7	4.67	79.79		
3:55 PM	0.270		16.9	6.96	1085	2.46	422.7	4.08	79.79		
4:00 PM	0.270		16.9	6.95	1079	2.50	421.9	4.07	79.80		
4:05 PM	0.270	11	16.7	6.97	1064	2.55	415.6	3.23	79.80		

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-14-20250415	Date:	4/15/2025 4:50:00 PM
Well ID:	MW-14	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Jackson Long
Equipment:	Field param meter: YSI Pro Plus # U115940X WL/int meter: Heron Dipper-T # U118301X		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	82.5 ft bgs	Screen Interval:	72.50 - 82.00 ft bgs
SAP Pump Depth:	82 ft btoc		

Water Level			
Date:	4/15/2025 4:00:00 PM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	77.77 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/15/2025 4:00:00 PM	End Date and Time:	4/15/2025 4:45:00 PM
Initial Pump Depth:	84 ft btoc	Final Pump Depth:	84 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	>30 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
4:05 PM	0.300		16.4	7.12	891	6.60	479.5	10.47	77.80	None	Clear
4:10 PM	0.300		16.4	7.33	872	6.68	480.2	7.61	77.81		
4:15 PM	0.300		16.3	7.33	872	6.72	483.0	7.62	77.81		
4:20 PM	0.300		16.2	7.33	871	6.74	393.4	6.94	77.82		
4:25 PM	0.300		16.3	7.33	870	6.74	421.5	6.33	77.82		
4:30 PM	0.300		16.3	7.32	871	6.77	436.9	1.67	77.82		
4:35 PM	0.300		16.2	7.32	870	6.78	455.2	1.61	77.83		
4:40 PM	0.300		16.3	7.32	870	6.77	458.8	1.56	77.83		
4:45 PM	0.300	13.5	16.3	7.32	870	6.78	464.1	1.51	77.83		

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-15-20250416	Date:	4/16/2025 1:55:00 PM
Well ID:	MW-15	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	23.5 ft bgs	Screen Interval:	8.50 - 23.50 ft bgs
SAP Pump Depth:	20.5 ft btoc		

Water Level			
Date:	4/16/2025 1:02:00 PM	Measured Well Depth:	25.00 ft btoc
Is Well Dry?	No	Depth to Water:	16.18 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 1:15:00 PM	End Date and Time:	4/16/2025 1:40:00 PM
Initial Pump Depth:	21 ft btoc	Final Pump Depth:	21 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	>30 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
1:20 PM	0.225		16.9	7.58	695	7.19	-29.1	9.85	16.24		Clear
1:25 PM	0.225		16.7	7.50	696	7.05	-49.2	6.35	16.25		Clear
1:30 PM	0.225		16.8	7.49	696	7.15	-49.9	6.27	16.25		Clear
1:35 PM	0.225		16.7	7.49	695	7.07	-48.9	9.28	16.25		Clear
1:40 PM	0.225	5.625	16.7	7.49	695	7.08	-48.7	6.35	16.25		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-16-20250416	Date:	4/16/2025 10:45:00 AM
Well ID:	MW-16	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	30 ft bgs	Screen Interval:	20.00 - 30.00 ft bgs
SAP Pump Depth:	31 ft btoc		

Water Level			
Date:	4/16/2025 10:10:00 AM	Measured Well Depth:	33.00 ft btoc
Is Well Dry?	No	Depth to Water:	27.13 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 10:10:00 AM	End Date and Time:	4/16/2025 10:35:00 AM
Initial Pump Depth:	31 ft btoc	Final Pump Depth:	Not Recorded
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	5.9 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
10:15 AM	0.200		17.0	7.51	698	7.35	-52.1	6.65	27.20		Clear
10:20 AM	0.200		16.9	7.48	696	7.17	-48.7	9.52	27.20		Clear
10:25 AM	0.200		16.9	7.47	696	7.15	-48.4	5.42	27.20		Clear
10:30 AM	0.200		16.9	7.47	696	7.19	-48.8	6.83	27.20		Clear
10:35 AM	0.200	5	17.0	7.46	696	7.15	-48.8	5.79	27.20		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-17-20250416	Date:	4/16/2025 12:45:00 PM
Well ID:	MW-17	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Jackson Long
Equipment:	Field param meter: YSI Pro Plus # U115940X WL/int meter: Heron Dipper-T # U118301X		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	83 ft bgs	Screen Interval:	73.00 - 83.00 ft bgs
SAP Pump Depth:	84 ft btoc		

Water Level			
Date:	4/16/2025 12:16:00 PM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	80.08 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 12:20:00 PM	End Date and Time:	4/16/2025 12:45:00 PM
Initial Pump Depth:	84 ft btoc	Final Pump Depth:	84 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	0.02 mg/L	Nitrate:	27.1 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
12:25 PM	0.320		17.5	7.07	992	9.00	493.8	35.71	80.05	None	None
12:30 PM	0.320		16.7	7.00	1012	6.33	500.2	34.69	80.05		
12:35 PM	0.320		16.4	6.86	999	5.28	498.8	3.27	80.05		
12:40 PM	0.320		16.3	6.85	997	5.21	495.3	2.82	80.05		
12:45 PM	0.320	11	16.4	6.84	995	5.18	489.8	2.58	80.05		

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-18-20250416	Date:	4/16/2025 9:20:00 AM
Well ID:	MW-18	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Jackson Long
Equipment:	Field param meter: YSI Pro Plus # U115940X WL/int meter: Heron Dipper-T # U118301X		
Comments:	Not Recorded		

Well Information			
Well Completion:	Flush	Well Diameter:	2 in
Total Depth:	87 ft bgs	Screen Interval:	72.00 - 87.00 ft bgs
SAP Pump Depth:	86.5 ft btoc		

Water Level			
Date:	4/16/2025 8:36:00 AM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	79.44 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 8:40:00 AM	End Date and Time:	4/16/2025 9:20:00 AM
Initial Pump Depth:	86.5 ft btoc	Final Pump Depth:	86.5 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	>30 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:45 AM	0.230		16.3	7.38	885	8.23	454.0	77.34	79.44	None	Clear
8:50 AM	0.230		16.2	7.35	868	8.36	461.3	17.13	79.44		
8:55 AM	0.230		16.3	7.31	864	8.37	467.4	12.36	79.44		
9:00 AM	0.230		16.3	7.29	863	8.40	470.3	6.03	79.44		
9:05 AM	0.230		16.2	7.32	862	8.42	461.2	4.99	79.44		
9:10 AM	0.230		16.3	7.33	861	8.43	450.8	3.92	79.44		
9:15 AM	0.230		16.4	7.32	859	8.43	446.8	3.49	79.44		
9:20 AM	0.230	11	16.4	7.31	858	8.44	444.3	3.29	79.44		

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-19-20250416	Date:	4/16/2025 3:45:00 PM
Well ID:	MW-19	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	87 ft bgs	Screen Interval:	72.00 - 87.00 ft bgs
SAP Pump Depth:	85 ft btoc		

Water Level			
Date:	4/16/2025 2:35:00 PM	Measured Well Depth:	89.00 ft btoc
Is Well Dry?	No	Depth to Water:	79.98 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 2:45:00 PM	End Date and Time:	4/16/2025 3:30:00 PM
Initial Pump Depth:	85 ft btoc	Final Pump Depth:	85 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	0.08 mg/L	Nitrate:	5.2 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
2:50 PM	0.250		17.4	7.10	1390	2.12	-56.7	43.31	80.06		Clear
2:55 PM	0.250		17.2	7.08	1318	1.08	-86.2	24.52	80.07		Clear
3:00 PM	0.250		17.3	7.09	1280	1.19	-86.9	22.91	80.07		Clear
3:05 PM	0.250		17.2	7.10	1196	1.49	-87.1	17.34	80.07		Clear
3:10 PM	0.250		17.2	7.11	1087	1.96	-84.9	13.25	80.07		Clear
3:15 PM	0.250		17.2	7.12	1038	2.17	-82.3	11.97	80.07		Clear
3:20 PM	0.250		17.2	7.14	978	2.43	-80.0	10.87	80.07		Clear
3:25 PM	0.250		17.2	7.14	977	2.45	-79.6	10.92	80.07		Clear
3:30 PM	0.250	11.25	17.1	7.14	968	2.48	-78.9	10.70	80.07		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-20-20250416	Date:	4/16/2025 5:10:00 PM
Well ID:	MW-20	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	99 ft bgs	Screen Interval:	79.00 - 94.00 ft bgs
SAP Pump Depth:	95 ft btoc		

Water Level			
Date:	4/16/2025 4:20:00 PM	Measured Well Depth:	97.00 ft btoc
Is Well Dry?	No	Depth to Water:	82.35 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 4:30:00 PM	End Date and Time:	4/16/2025 4:50:00 PM
Initial Pump Depth:	95 ft btoc	Final Pump Depth:	95 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	0.05 mg/L	Nitrate:	20.9 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
4:30 PM	0.250		17.6	7.52	690	8.19	-38.9	5.97	82.42		Clear
4:35 PM	0.250		17.4	7.54	689	8.21	-38.5	5.47	82.42		Clear
4:40 PM	0.250		17.0	7.59	689	8.33	-35.4	3.72	82.42		Clear
4:45 PM	0.250		17.0	7.60	689	8.33	-34.7	3.62	82.42		Clear
4:50 PM	0.250	6.25	17.0	7.61	688	8.37	-33.8	3.50	82.42		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-21-20250416	Date:	4/16/2025 10:55:00 AM
Well ID:	MW-21	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Jackson Long
Equipment:	Field param meter: YSI Pro Plus # U115940X WL/int meter: Heron Dipper-T # U118301X		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	93 ft bgs	Screen Interval:	77.00 - 92.00 ft bgs
SAP Pump Depth:	93 ft btoc		

Water Level			
Date:	4/16/2025 10:17:00 AM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	81.99 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 10:20:00 AM	End Date and Time:	4/16/2025 10:55:00 AM
Initial Pump Depth:	93 ft btoc	Final Pump Depth:	93 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	<0.02 mg/L	Nitrate:	>30 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
10:25 AM	0.300		16.4	7.45	827	8.21	439.1	1.78	81.99	None	Clear
10:30 AM	0.300		16.2	7.47	828	8.24	446.7	1.85	81.99		
10:35 AM	0.300		16.3	7.47	828	8.25	455.0	1.63	81.99		
10:40 AM	0.300		16.3	7.47	828	8.25	463.4	1.63	81.99		
10:45 AM	0.300		16.3	7.47	829	8.24	470.2	1.58	81.99		
10:50 AM	0.300		16.3	7.47	829	8.26	474.8	1.54	81.99		
10:55 AM	0.300	12	16.3	7.47	830	8.27	479.3	1.64	81.99		

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #: 60722666	
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event: 2025-Q2-GW	

Sample Information			
Sample ID:	MW-22-20250415	Date:	4/15/2025 12:10:00 PM
Well ID:	MW-22	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Stick-up	Well Diameter:	2 in
Total Depth:	95 ft bgs	Screen Interval:	79.00 - 94.00 ft bgs
SAP Pump Depth:	94 ft btoc		

Water Level			
Date:	4/15/2025 11:19:00 AM	Measured Well Depth:	Not Recorded
Is Well Dry?	No	Depth to Water:	76.33 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/15/2025 11:34:00 AM	End Date and Time:	4/15/2025 12:00:00 PM
Initial Pump Depth:	94 ft btoc	Final Pump Depth:	94 ft btoc
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	0.06 mg/L	Nitrate:	>30 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
11:40 AM	0.250		16.8	7.63	674	6.86	-62.1	32.60	76.40		Clear
11:45 AM	0.250		16.5	7.62	676	8.40	-43.6	16.91	76.40		Clear
11:50 AM	0.250		16.6	7.59	676	8.44	-39.7	6.62	76.40		Clear
11:55 AM	0.250		16.5	7.59	675	8.38	-39.0	18.24	76.40		Clear
12:00 PM	0.250	6.25	16.6	7.59	677	8.45	-39.0	22.34	76.40		Clear

Reviewer Comments

GROUNDWATER SAMPLING LOG

Client:	Marathon Petroleum Corporation (MPC)	Project #:	60722666
Site:	Chevron Pipe Line Company Pasco Bulk Fuel Terminal	Event:	2025-Q2-GW

Sample Information			
Sample ID:	MW-23-20250416	Date:	4/16/2025 9:15:00 AM
Well ID:	MW-23	Location Type:	Monitoring Well
Duplicate ID:	Not Applicable	Sampler:	Dietrich Tietjen
Equipment:	Field param meter: YSI Pro Plus # U115177x WL/int meter: Heron Dipper-T # U110989x		
Comments:	Not Recorded		

Well Information			
Well Completion:	Flush	Well Diameter:	2 in
Total Depth:	96 ft bgs	Screen Interval:	80.00 - 95.00 ft bgs
SAP Pump Depth:	92 ft btoc		

Water Level			
Date:	4/16/2025 8:35:00 AM	Measured Well Depth:	95.00 ft btoc
Is Well Dry?	No	Depth to Water:	77.63 ft btoc
Notes:	Not Recorded		

Purge Information			
Begin Date and Time:	4/16/2025 8:41:00 AM	End Date and Time:	4/16/2025 9:05:00 AM
Initial Pump Depth:	92 ft btoc	Final Pump Depth:	Not Recorded
Purge Method:	Low flow (pump type: Bladder)	Sample Method:	Low flow
Notes:	Not Recorded		

Natural Attenuation Field Parameters			
Ferrous Iron:	>0.02 mg/L	Nitrate:	16.6 mg/L

Time	Purge Rate (l/min)	Cumulative Purge Volume (l)	Temperature (deg C)	pH (su)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Purge Depth to Water (ft)	Odor (none)	Color (none)
8:50 AM	0.200		16.2	7.54	683	7.26	-39.7	6.20	77.68		Clear
8:55 AM	0.200		16.1	7.57	689	7.51	-43.0	5.92	77.68		Clear
9:00 AM	0.200		16.1	7.58	690	7.64	-42.3	3.64	77.68		Clear
9:05 AM	0.200	4	16.1	7.58	690	7.67	-41.9	3.31	77.68		Clear

Reviewer Comments

ATTACHMENT B

Groundwater Data and Analytical Results – 2014-2025

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
	Cleanup Levels [1]					*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
	Units:	*ft NAVD29* [2]	*ft btoc*	*ft NAVD29* [2]	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-02	05-29-2014	417.28	72.83	344.45	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-29-2014	417.28	74.03	343.25	1.20	250 U	250 U	500 U	0.50 U	**0.68**	0.50 U	0.50 U	0.50 U
	06-04-2015	417.28	73.31	343.97	-0.72	250 U	**140**	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	09-28-2015	417.28	74.42	342.86	1.11	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	08-29-2016	417.28	74.52	342.76	0.10	50 U	**1400**	**710**	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	12-05-2016	417.28	74.02	343.26	-0.50	50 U	**410**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-17-2017	417.28	72.86	344.42	-1.16	-	-	-	-	-	-	-	-
	10-24-2017	417.28	74.12	343.16	1.26	250 U	**580**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-14-2018	417.28	72.89	344.39	-1.23	250 U	**450**	**480**	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	12-02-2018	417.23	73.93	343.30	1.09	100 U	**1300**	**1800**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-26-2019	417.23	73.49	343.74	-0.44	100 U	**1500**	**1200**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-11-2019	417.23	73.75	343.48	0.26	100 U	**1600**	**1100**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-24-2020	417.23	73.38	343.85	-0.37	100 U	**1200**	**930**	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-15-2020	417.23	73.71	343.52	0.33	100 U	**460**	120 U	0.24 U	0.39 U	0.50 U	3.0 U	4.0 U
	05-25-2021	417.23	73.69	343.54	-0.02	31.6 U	**1250**	**901**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-26-2021	417.23	74.38	342.85	0.69	100 U	**630**	**460**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-03-2022	417.23	73.98	343.25	-0.40	100 U	**2850**	**8560**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-26-2023	417.23	73.00	344.23	-0.98	100 U	**1240**	**969**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-12-2023	417.23	73.88	343.35	0.88	100 U	**874**	**1020**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-12-2024	417.23	73.02	344.21	-0.86	100 U	**790**	**1340**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	417.23	74.00	343.23	0.98	-	-	-	-	-	-	-	-
	04-17-2025	417.23	72.96	344.27	-1.04	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-03	05-28-2014	423.42	78.85	344.57	-	250 U	**1100**	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-30-2014	423.42	80.18	343.24	1.33	**620**	**18000**	500 U	0.50 U	**1.4**	0.50 U	0.50 U	0.50 U
	06-04-2015	423.42	79.46	343.96	-0.72	250 U	**3300**	250 U	0.50 U	0.50 U	0.50 U	1.0 U	**0.51**
	09-29-2015	423.42	80.58	342.84	1.12	**733**	**3300**	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	08-30-2016	423.42	80.60	342.82	0.02	**1400**	**11000**	**1100**	2.0 U	2.0 U	3.0 U	3.0 U	**2.5**
	12-02-2016	423.42	80.17	343.25	-0.43	**290**	**6600**	**290**	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-16-2017	423.42	79.04	344.38	-1.13	500 U	**2600**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	10-25-2017	423.42	80.23	343.19	1.19	**380**	**5700**	**410**	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-14-2018	423.42	79.20	344.22	-1.03	250 U	**4700**	**860**	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	12-04-2018	423.40	80.00	343.40	0.82	**180 J**	**8800**	**2000**	0.53 U	0.39 U	0.50 U	3.0 U	0.93 U
	06-26-2019	423.40	79.64	343.76	-0.36	**300**	**8600**	**1900**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-11-2019	423.40	79.93	343.47	0.29	**230 J**	**2700 J**	**830 J**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-24-2020	423.40	79.57	343.83	-0.36	**200 J**	**4400**	**920**	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-16-2020	423.40	79.92	343.48	0.35	**150 J**	**2200**	**210 J**	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	05-27-2021	423.40	79.86	343.54	-0.06	632 U	**12100 J**	**3500 J**	0.471 U	1.39 U	0.685 U	0.870 U	5.00 UJ
	10-25-2021	423.40	80.49	342.91	0.63	**213**	**6910**	**1740**	0.471 U	1.39 U	0.685 U	**1.30 J**	5.00 U
	11-02-2022	423.40	80.16	343.24	-0.33	**117 J**	**5860**	**1410**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-25-2023	423.40	79.16	344.24	-1.00	100 U	**5120**	**1240**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-11-2023	423.40	79.94	343.46	0.78	**140 J**	**7840**	**2180**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-12-2024	423.40	79.18	344.22	-0.76	100 U	**7150**	**2280**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	423.40	80.14	343.26	0.96	-	-	-	-	-	-	-	-
	04-15-2025	423.40	79.10	344.30	-1.04	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
	Cleanup Levels [1]					*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
	Units:	*ft NAVD29* [2]	*ft btoc*	*ft NAVD29* [2]	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-04	05-28-2014	412.09	67.98	344.11	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-28-2014	412.09	69.17	342.92	1.19	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	06-03-2015	412.09	68.48	343.61	-0.69	250 U	100 U	250 U	0.50 U	**0.52**	0.50 U	1.0 U	0.50 U
	09-28-2015	412.09	69.52	342.57	1.04	-	-	-	-	-	-	-	-
	08-30-2016	412.09	69.66	342.43	0.14	50 U	110 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-15-2017	412.09	68.02	344.07	-	500 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-13-2018	412.05	68.15	343.90	0.17	250 U	110 U	350 U	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	06-26-2019	412.05	68.68	343.37	0.53	100 U	69 U	100 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-09-2019	412.05	68.98	343.07	0.30	-	-	-	-	-	-	-	-
	06-23-2020	412.05	68.62	343.43	-0.36	100 U	69 U	100 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-14-2020	412.05	68.90	343.15	0.28	-	-	-	-	-	-	-	-
	05-25-2021	412.05	68.84	343.21	-0.06	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-25-2021	412.05	69.47	342.58	0.63	-	-	-	-	-	-	-	-
	10-31-2022	412.05	69.11	342.94	-0.36	-	-	-	-	-	-	-	-
	04-25-2023	412.05	68.24	343.81	-0.87	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-13-2023	412.05	69.00	343.05	0.76	100 U	200 U	**490**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-14-2024	412.05	68.32	343.73	-0.68	100 U	200 U	**343**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-02-2024	412.05	69.30	342.75	0.98	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-15-2025	412.05	68.26	343.79	-1.04	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-06	05-29-2014	358.61	15.57	343.04	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-29-2014	358.61	16.82	341.79	1.25	250 U	250 U	500 U	0.50 U	**4.9**	0.50 U	0.50 U	0.50 U
	06-03-2015	358.61	16.18	342.43	-0.64	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	09-28-2015	358.61	17.15	341.46	0.97	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	08-30-2016	358.61	17.15	341.46	0.00	50 U	110 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	12-05-2016	358.61	16.91	341.70	-0.24	50 U	110 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-16-2017	358.61	15.88	342.73	-1.03	500 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	10-23-2017	358.61	17.01	341.60	1.13	250 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-11-2018	358.61	15.73	342.88	-1.28	250 U	**180**	**460**	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	12-02-2018	358.52	16.95	341.57	1.31	100 U	**71 J**	350 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-26-2019	358.52	16.48	342.04	-0.47	100 U	71 U	110 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-10-2019	358.52	16.97	341.55	0.49	100 U	62 U	92 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-23-2020	358.52	16.31	342.21	-0.66	100 U	69 U	100 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-16-2020	358.52	16.61	341.91	0.30	100 U	110 U	120 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	05-24-2021	358.52	16.44	342.08	-0.17	31.6 U	66.7 U	**120 J**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-26-2021	358.52	16.99	341.53	0.55	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-02-2022	358.52	16.75	341.77	-0.24	100 U	**224**	**519**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-25-2023	358.52	16.20	342.32	-0.55	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-10-2023	358.52	16.79	341.73	0.59	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-13-2024	358.52	16.26	342.26	-0.53	100 U	200 U	**278**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-02-2024	358.52	16.99	341.53	0.73	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-16-2025	358.52	16.22	342.23	-0.70	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
					Cleanup Levels [1]	800	500	500	5	1,000	700	1,000	160
	Units:	ft NAVD29 [2]	ft btoc	ft NAVD29 [2]	ft	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-07	05-28-2014	411.40	67.02	344.38	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-29-2014	411.40	68.23	343.17	1.21	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	06-03-2015	411.40	67.48	343.92	-0.75	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	09-28-2015	411.40	68.61	342.79	1.13	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	08-30-2016	411.40	68.74	342.66	0.13	50 U	110 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	12-05-2016	411.40	68.18	343.22	-0.56	50 U	110 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-15-2017	411.40	67.02	344.38	-1.16	500 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	10-24-2017	411.40	68.22	343.18	1.20	250 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-13-2018	411.40	67.16	344.24	-1.06	250 U	110 U	350 U	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	12-04-2018	411.32	68.03	343.29	0.95	100 U	**86 J**	97 U	0.53 U	0.39 U	**0.60 J**	3.0 U	0.93 U
	06-26-2019	411.32	67.68	343.64	-0.35	100 U	**110**	98 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-11-2019	411.32	67.58	343.74	-0.10	100 U	**67 J**	99 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-23-2020	411.32	67.57	343.75	-0.01	100 U	66 U	98 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-14-2020	411.32	67.87	343.45	0.30	100 U	110 U	120 U	0.24 U	0.39 U	0.50 U	3.0 U	4.0 U
	05-25-2021	411.32	67.82	343.50	-0.05	31.6 U	66.7 U	**103 J**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-27-2021	411.32	68.47	342.85	0.65	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-02-2022	411.32	68.12	343.20	-0.35	100 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-25-2023	411.32	67.15	344.17	-0.97	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-10-2023	411.32	67.98	343.34	0.83	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-13-2024	411.32	67.23	344.09	-0.75	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-02-2024	411.32	68.14	343.18	0.91	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-17-2025	411.32	67.12	344.06	-0.88	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-08	05-28-2014	383.91	39.56	344.35	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-29-2014	383.91	40.78	343.13	1.22	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	06-03-2015	383.91	40.04	343.87	-0.74	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	09-28-2015	383.91	41.13	342.78	1.09	-	-	-	-	-	-	-	-
	08-30-2016	383.91	40.30	343.61	-0.83	50 U	110 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-17-2017	383.91	39.56	344.35	-0.74	500 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-11-2018	383.76	39.65	344.11	0.24	250 U	110 U	350 U	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	06-26-2019	383.76	40.26	343.50	0.61	100 U	71 U	100 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-09-2019	383.76	40.48	343.28	0.22	-	-	-	-	-	-	-	-
	06-23-2020	383.76	40.14	343.62	-0.34	100 U	68 U	100 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-14-2020	383.76	40.44	343.32	0.30	-	-	-	-	-	-	-	-
	05-26-2021	383.76	40.38	343.38	-0.06	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-25-2021	383.76	41.03	342.73	0.65	-	-	-	-	-	-	-	-
	10-31-2022	383.76	46.71	337.05	5.68	-	-	-	-	-	-	-	-
	04-25-2023	383.76	39.93	343.83	-6.78	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-11-2023	383.76	40.59	343.17	0.66	100 U	200 U	**351**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-13-2024	383.76	39.77	343.99	-0.82	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-02-2024	383.76	40.71	343.05	0.94	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-15-2025	383.76	39.70	343.98	-0.93	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
	Cleanup Levels [1]					*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
	Units:	*ft NAVD29* [2]	*ft btoc*	*ft NAVD29* [2]	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-10	05-28-2014	407.91	63.46	344.45	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-29-2014	407.91	64.68	343.23	1.22	250 U	250 U	500 U	0.50 U	**1.1**	0.50 U	0.50 U	0.50 U
	06-03-2015	407.91	63.91	344.00	-0.77	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	09-28-2015	407.91	65.02	342.89	1.11	-	-	-	-	-	-	-	-
	08-30-2016	407.91	65.22	342.69	0.20	50 U	110 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-15-2017	407.91	63.50	344.41	-1.72	500 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-13-2018	407.83	63.58	344.25	0.16	250 U	110 U	350 U	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	06-26-2019	407.83	64.15	343.68	0.57	100 U	**88 J**	**110 J**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-09-2019	407.83	64.37	343.46	0.22	-	-	-	-	-	-	-	-
	06-23-2020	407.83	64.03	343.80	-0.34	100 U	66 U	98 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-14-2020	407.83	64.36	343.47	0.33	-	-	-	-	-	-	-	-
	05-25-2021	407.83	64.30	343.53	-0.06	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-31-2022	407.83	64.60	343.23	0.30	-	-	-	-	-	-	-	-
	04-25-2023	407.83	63.63	344.20	-0.97	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-10-2023	407.83	64.45	343.38	0.82	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-13-2024	407.83	63.64	344.19	-0.81	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-02-2024	407.83	64.72	343.11	1.08	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-17-2025	407.83	63.62	344.10	-0.99	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-11	05-29-2014	423.48	79.19	344.29	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-30-2014	423.48	80.31	343.17	1.12	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	06-04-2015	423.48	79.55	343.93	-0.76	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	09-29-2015	423.48	80.67	342.81	1.12	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	08-29-2016	423.48	80.42	343.06	-0.25	50 U	**520**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	12-05-2016	423.48	80.29	343.19	-0.13	50 U	**360**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-16-2017	423.48	79.15	344.33	-1.14	500 U	**390**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	10-25-2017	423.48	80.31	343.17	1.16	250 U	**360**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-14-2018	423.48	79.30	344.18	-1.01	250 U	**160**	350 U	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	12-02-2018	423.44	80.14	343.30	0.88	100 U	**500**	**570 J**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-27-2019	423.44	79.79	343.65	-0.35	100 U	**400**	**320 J**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-11-2019	423.44	80.01	343.43	0.22	100 U	**130**	91 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-24-2020	423.44	79.66	343.78	-0.35	100 U	**3900**	**2300**	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-15-2020	423.44	79.95	343.49	0.29	100 U	**210 J**	130 U	0.24 U	0.39 U	0.50 U	3.0 U	4.0 U
	05-25-2021	423.44	79.95	343.49	0.00	31.6 U	**765 J**	**428 J**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-27-2021	423.44	80.62	342.82	0.67	31.6 U	**499**	**230 J**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-02-2022	423.44	80.21	343.23	-0.41	100 U	**200 J**	**84.6 J**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-26-2023	423.44	79.28	344.16	-0.93	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-12-2023	423.44	80.07	343.37	0.79	100 U	**350**	**599**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-12-2024	423.44	79.30	344.14	-0.77	100 U	**334**	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	423.44	80.25	343.19	0.95	-	-	-	-	-	-	-	-
	04-15-2025	423.44	79.17	344.64	-0.50	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
	Cleanup Levels [1]					*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
	Units:	*ft NAVD29* [2]	*ft btoc*	*ft NAVD29* [2]	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-12	05-29-2014	423.65	79.26	344.39	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-30-2014	423.65	80.45	343.20	1.19	250 U	250 U	500 U	0.50 U	**0.66**	0.50 U	0.50 U	0.50 U
	06-04-2015	423.65	79.72	343.93	-0.73	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	09-29-2015	423.65	80.83	342.82	1.11	250 U	100 U	250 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
	12-06-2016	423.65	80.48	343.17	-0.35	50 U	110 U	250 U	**6.0**	2.0 U	3.0 U	3.0 U	2.0 U
	05-16-2017	423.65	79.30	344.35	-1.18	500 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	10-24-2017	423.65	80.45	343.20	1.15	250 U	**160**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-14-2018	423.65	79.30	344.35	-1.15	250 U	**160**	350 U	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	12-03-2018	423.62	80.22	343.40	0.95	100 U	**270**	**240 J**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-27-2019	423.62	79.97	343.65	-0.25	100 U	**270**	**300 J**	**0.63 J**	0.39 U	0.50 U	0.75 U	0.93 U
	12-11-2019	423.62	80.20	343.42	0.23	100 U	**170**	91 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-24-2020	423.62	79.85	343.77	-0.35	100 U	**450**	**330 J**	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-16-2020	423.62	80.14	343.48	0.29	100 U	110 U	120 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	05-27-2021	423.62	80.06	343.56	-0.08	31.6 U	**601**	**448**	1.00 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-27-2021	423.62	80.79	342.83	0.73	31.6 U	**273**	**652**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-02-2022	423.62	80.37	343.25	-0.42	100 U	66.7 U	**736**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-26-2023	423.62	79.45	344.17	-0.92	100 U	**234**	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-12-2023	423.62	80.30	343.32	0.85	100 U	**419**	**749**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-12-2024	423.62	79.52	344.10	-0.78	100 U	**290**	**441**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	423.62	80.46	343.16	0.94	-	-	-	-	-	-	-	-
	04-16-2025	423.62	79.41	344.05	0.05	100 U	**335**	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-14	05-29-2014	421.97	77.58	344.39	-	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10-29-2014	421.97	78.80	343.17	1.22	250 U	250 U	500 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	06-04-2015	421.97	78.04	343.93	-0.76	250 U	100 U	250 U	0.50 U	**0.72**	0.50 U	1.0 U	0.50 U
	09-28-2015	421.97	79.18	342.79	1.14	250 U	100 U	250 U	0.50 U	**0.72**	0.50 U	1.0 U	0.50 U
	08-29-2016	421.97	79.32	342.65	0.14	50 U	**120**	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	12-05-2016	421.97	78.75	343.22	-0.57	50 U	110 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	05-17-2017	421.97	77.55	344.42	-1.20	500 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	10-24-2017	421.97	78.78	343.19	1.23	250 U	100 U	250 U	2.0 U	2.0 U	3.0 U	3.0 U	2.0 U
	06-13-2018	421.97	77.74	344.23	-1.04	250 U	**110**	350 U	3.0 U	2.0 U	3.0 U	3.0 U	4.0 U
	12-02-2018	421.84	78.53	343.31	0.92	100 U	**170**	350 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-27-2019	421.84	78.28	343.56	-0.25	100 U	**80 J**	**120 J**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-11-2019	421.84	78.52	343.32	0.24	100 U	67 U	99 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-24-2020	421.84	78.16	343.68	-0.36	100 U	73 U	110 U	0.24 U	0.39 U	0.50 U	0.39 U	**1.0 J**
	12-15-2020	421.84	78.46	343.38	0.30	100 U	110 U	120 U	0.24 U	0.39 U	0.50 U	3.0 U	4.0 U
	05-25-2021	421.84	78.43	343.41	-0.03	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-26-2021	421.84	79.20	342.64	0.77	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-03-2022	421.84	78.73	343.11	-0.47	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-26-2023	421.84	77.97	343.87	-0.76	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-12-2023	421.84	78.62	343.22	0.65	100 U	200 U	**408**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-12-2024	421.84	77.77	344.07	-0.85	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-02-2024	421.84	79.10	342.74	1.33	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-15-2025	421.84	77.76	344.07	-1.33	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
	Cleanup Levels [1]					*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
	Units:	*ft NAVD29* [2]	*ft btoc*	*ft NAVD29* [2]	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-15	12-03-2018	358.50	16.69	341.81	-	100 U	**70 J**	97 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-26-2019	358.50	16.41	342.09	-0.28	100 U	66 U	98 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-10-2019	358.50	16.78	341.72	0.37	100 U	64 U	95 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-23-2020	358.50	16.17	342.33	-0.61	100 U	68 U	**110 J**	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-14-2020	358.50	16.43	342.07	0.26	100 U	110 U	120 U	0.24 U	0.39 U	0.50 U	3.0 U	4.0 U
	05-25-2021	358.50	16.34	342.16	-0.09	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-25-2021	358.50	16.90	341.60	0.56	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-02-2022	358.50	16.63	341.87	-0.27	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-25-2023	358.50	16.08	342.42	-0.55	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-10-2023	358.50	16.66	341.84	0.58	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-13-2024	358.50	16.22	342.28	-0.44	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-02-2024	358.50	17.04	341.46	0.82	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-16-2025	358.50	16.05	342.32	-0.86	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-16	12-03-2018	370.92	27.95	342.97	-	100 U	**82 J**	96 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-10-2019	370.92	27.79	343.13	-0.16	100 U	62 U	91 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-22-2020	370.92	27.41	343.51	-0.38	100 U	71 U	100 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-16-2020	370.92	27.69	343.23	0.28	100 U	120 U	130 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	05-25-2021	370.92	27.68	343.24	-0.01	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-26-2021	370.92	28.32	342.60	0.64	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-02-2022	370.92	27.92	343.00	-0.40	100 U	66.7 U	**207 J**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-25-2023	370.92	27.14	343.78	-0.78	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-11-2023	370.92	27.92	343.00	0.78	100 U	200 U	**266**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-13-2024	370.92	27.24	343.68	-0.68	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-02-2024	370.92	28.15	342.77	0.91	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-16-2025	370.92	27.08	343.79	-1.02	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-17	12-03-2018	424.28	81.00	343.28	-	**180 J**	**880**	**850**	**2.9 J**	**1.9 J**	**8.6 J**	**38 J**	**4.7 J**
	06-27-2019	424.28	80.62	343.66	-0.38	100 U	**530**	**640**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-11-2019	424.28	81.84	342.44	1.22	100 U	**960**	**800**	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-24-2020	424.28	80.48	343.80	-1.36	100 U	**750**	**420**	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-15-2020	424.28	80.80	343.48	0.32	100 U	**350**	120 U	0.24 U	0.39 U	0.50 U	3.0 U	4.0 U
	05-25-2021	424.28	80.78	343.50	-0.02	31.6 U	**486**	**358**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-26-2021	424.28	81.50	342.78	0.72	31.6 U	**855**	**674**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-03-2022	424.28	81.04	343.24	-0.46	100 U	**903**	**503**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-26-2023	424.28	80.12	344.16	-0.92	100 U	**604**	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-12-2023	424.28	80.93	343.35	0.81	100 U	**434**	**566**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-13-2024	424.28	80.11	344.17	-0.82	100 U	**777 J**	**420 J**	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	424.28	81.20	343.08	1.09	-	-	-	-	-	-	-	-
	04-16-2025	424.28	80.02	344.20	-0.03	100 U	**545**	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
					Cleanup Levels [1]	*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
	Units:	*ft NAVD29* [2]	*ft btoc*	*ft NAVD29* [2]	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-18	12-04-2018	423.66	-	-	-	**280**	65 U	96 U	**1.4 J**	**0.83 J**	**3.2**	**15**	**1.7 J**
	06-26-2019	423.69	80.01	343.68	-	100 U	**68 J**	100 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	12-12-2019	423.69	80.12	343.57	0.11	100 U	62 U	91 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-22-2020	423.69	79.81	343.88	-0.31	100 U	68 U	100 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-15-2020	423.69	80.11	343.58	0.30	100 U	110 U	120 U	0.24 U	0.39 U	0.50 U	3.0 U	4.0 U
	05-26-2021	423.69	80.11	343.58	0.00	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-26-2021	423.69	80.78	342.91	0.67	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-01-2022	423.69	80.32	343.37	-0.46	100 U	66.7 U	**101 J**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-26-2023	423.69	79.44	344.25	-0.88	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-11-2023	423.69	80.29	343.40	0.85	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-14-2024	423.69	79.48	344.21	-0.81	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-03-2024	423.69	80.55	343.14	1.07	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-16-2025	423.69	79.40	344.25	-1.11	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-19	12-03-2018	424.20	80.80	343.40	-	**18000 J**	**3100**	**110 J**	**300**	**160**	**740**	**630**	**390**
	06-27-2019	424.20	80.50	343.70	-0.30	**3200**	**930**	**98 U**	**160**	**23**	**180**	**260**	**110 J**
	12-10-2019	424.20	80.72	343.48	0.22	**530**	**320**	**93** U	**27**	4.1 U	**14**	**56**	**18**
	06-24-2020	424.20	80.27	343.93	-0.45	100 U	**110**	**110 J**	**6.0**	0.39 U	**0.57 J**	**2.9 J**	**4.6 J**
	12-16-2020	424.20	80.65	343.55	0.38	100 U	110 U	120 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	05-26-2021	424.20	80.61	343.59	-0.04	**51.2 J**	**147 J**	83.3 U	1.00 U	0.278 U	0.137 U	3.00 U	**1.56 J**
	10-27-2021	424.20	81.31	342.89	0.70	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-01-2022	424.20	80.92	343.28	-0.39	100 U	66.7 U	**97.8 J**	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-26-2023	424.20	79.96	344.24	-0.96	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-11-2023	424.20	80.81	343.39	0.85	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-12-2024	424.20	80.01	344.19	-0.80	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	424.20	81.06	343.14	1.05	-	-	-	-	-	-	-	-
	04-16-2025	424.20	79.92	344.22	-0.03	100 U	200 U	250 U	1.00 U	1.00 U	**1.21**	3.00 U	5.00 U
MW-20	12-12-2019	426.52	82.84	343.68	-	100 U	**77 J**	99 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-22-2020	426.52	82.68	343.84	-0.16	100 U	70 U	100 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-16-2020	426.52	82.93	343.59	0.25	100 U	120 U	130 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	05-26-2021	426.52	82.94	343.58	0.01	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-26-2021	426.52	83.60	342.92	0.66	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-01-2022	426.52	83.26	343.26	-0.34	100 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-26-2023	426.52	83.43	343.09	0.17	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-11-2023	426.52	83.13	343.39	-0.30	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-14-2024	426.52	82.33	344.19	-0.80	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-03-2024	426.52	83.54	342.98	1.21	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-16-2025	426.52	82.21	344.17	-1.19	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
					Cleanup Levels [1]	*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
	Units:	*ft NAVD29* [2]	*ft btoc*	*ft NAVD29* [2]	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-21	12-12-2019	426.16	82.65	343.51	-	100 U	67 U	99 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-22-2020	426.16	82.42	343.74	-0.23	100 U	72 U	**110 J**	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-15-2020	426.16	82.70	343.46	0.28	100 U	120 U	130 U	0.24 U	0.39 U	0.50 U	3.0 U	0.93 U
	05-26-2021	426.16	82.66	343.50	-0.04	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-27-2021	426.16	83.33	342.83	0.67	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-02-2022	426.16	83.07	343.09	-0.26	100 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-25-2023	426.16	82.00	344.16	-1.07	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-12-2023	426.16	82.84	343.32	0.84	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-14-2024	426.16	82.06	344.10	-0.78	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	426.16	83.12	343.04	1.06	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-16-2025	426.16	81.93	344.17	-1.13	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-22	12-11-2019	420.45	77.00	343.45	-	100 U	64 U	94 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-23-2020	420.45	76.76	343.69	-0.24	100 U	66 U	97 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-15-2020	420.45	77.04	343.41	0.28	100 U	120 U	130 U	0.24 U	0.39 U	0.50 U	3.0 U	0.93 U
	05-26-2021	420.45	77.00	343.45	-0.04	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-27-2021	420.45	77.64	342.81	0.64	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-02-2022	420.45	77.29	343.16	-0.35	100 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-25-2023	420.45	76.34	344.11	-0.95	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-13-2023	420.45	77.20	343.25	0.86	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-14-2024	420.45	76.39	344.06	-0.81	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	420.45	77.32	343.13	0.93	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-15-2025	420.45	76.34	344.12	-0.99	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
MW-23	12-11-2019	421.74	78.30	343.44	-	100 U	61 U	90 U	0.53 U	0.39 U	0.50 U	0.75 U	0.93 U
	06-23-2020	421.74	77.94	343.80	-0.36	100 U	71 U	100 U	0.24 U	0.39 U	0.50 U	0.39 U	0.93 U
	12-15-2020	421.74	78.26	343.48	0.32	100 U	110 U	120 U	0.24 U	0.39 U	0.50 U	3.0 U	4.0 U
	05-26-2021	421.74	78.30	343.44	0.04	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 UJ
	10-27-2021	421.74	78.93	342.81	0.63	31.6 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	11-03-2022	421.74	78.53	343.21	-0.40	100 U	66.7 U	83.3 U	0.0941 U	0.278 U	0.137 U	0.174 U	1.00 U
	04-24-2023	421.74	77.62	344.12	-0.91	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 UJ
	10-12-2023	421.74	78.44	343.30	0.82	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	03-14-2024	421.74	77.70	344.04	-0.74	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	10-01-2024	421.74	78.67	343.07	0.97	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U
	04-16-2025	421.74	77.59	344.11	-1.04	100 U	200 U	250 U	1.00 U	1.00 U	1.00 U	3.00 U	5.00 U

Table B1: Groundwater Elevations and Analytical Results - 2014-2025

Well ID	Sample Date	TOC Elevation	Depth to GW	GW Elevation	Change in GW Elevation	TPH-g	TPH-d	TPH-o	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
				Cleanup Levels (1)		*800*	*500*	*500*	*5*	*1,000*	*700*	*1,000*	*160*
	Units:	*ft NAVD29* (2)	*ft btoc*	*ft NAVD29* (2)	*ft*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
AR-11	06-25-2019	422.62	78.84	343.78	-	-	-	-	-	-	-	-	-
	12-09-2019	422.62	78.96	343.66	0.12	-	-	-	-	-	-	-	-
	06-22-2020	422.62	78.63	343.99	-0.33	-	-	-	-	-	-	-	-
	12-15-2020	422.62	79.01	343.61	0.38	-	-	-	-	-	-	-	-
	05-24-2021	422.62	78.98	343.64	-0.03	-	-	-	-	-	-	-	-
	10-25-2021	422.62	79.62	343.00	0.64	-	-	-	-	-	-	-	-
	10-31-2022	422.62	79.18	343.44	-0.44	-	-	-	-	-	-	-	-
	04-24-2023	422.62	78.28	344.34	-0.90	-	-	-	-	-	-	-	-
	10-09-2023	422.62	79.15	343.47	0.87	-	-	-	-	-	-	-	-
	03-11-2024	422.62	78.35	344.27	-0.80	-	-	-	-	-	-	-	-
	10-01-2024	422.62	79.31	343.31	0.96	-	-	-	-	-	-	-	-
	04-14-2025	422.62	78.25	344.37	-1.06	-	-	-	-	-	-	-	-
TMW-05	06-25-2019	425.02	81.29	343.73	-	-	-	-	-	-	-	-	-
	12-09-2019	425.02	81.40	343.62	0.11	-	-	-	-	-	-	-	-
	06-22-2020	425.02	81.07	343.95	-0.33	-	-	-	-	-	-	-	-
	12-15-2020	425.02	81.46	343.56	0.39	-	-	-	-	-	-	-	-
	05-24-2021	425.02	81.41	343.61	-0.05	-	-	-	-	-	-	-	-
	10-25-2021	425.02	82.06	342.96	0.65	-	-	-	-	-	-	-	-
	10-31-2022	425.02	81.63	343.39	-0.43	-	-	-	-	-	-	-	-
	04-24-2023	425.02	80.73	344.29	-0.90	-	-	-	-	-	-	-	-
	10-09-2023	425.02	81.60	343.42	0.87	-	-	-	-	-	-	-	-
	03-11-2024	425.02	80.81	344.21	-0.79	-	-	-	-	-	-	-	-
	10-01-2024	425.02	81.78	343.24	0.97	-	-	-	-	-	-	-	-
	04-14-2025	425.02	80.70	344.32	-1.08	-	-	-	-	-	-	-	-

Notes:
Values in **bold** were reported as detected
= Yellow shaded detections exceed the cleanup level
- = not analyzed or sample not collected
(1) The Cleanup Levels are included in Table 1 of the *Compliance Monitoring Plan* (AECOM, 2023).
(2) On February 7, 2019, the wells were resurveyed by Stratton Surveying and Mapping, P.C. MW-20 through MW-23 were surveyed on December 10, 2019. Horizontal datum = Washington State Plane South Zone North American Datum 1983(1991). Vertical datum = North American Vertical Datum 29.

Acronyms:
µg/L = microgram per liter
btoc - below top of casing
ft = feet
GW = groundwater
J = estimated concentration
NAVD29 = North American Vertical Datum of 1929
TOC = top of casing
TPH-d = total petroleum hydrocarbons, diesel range
TPH-g = total petroleum hydrocarbons, gasoline range
TPH-o = total petroleum hydrocarbons, oil range
U = Analyte not detected above limit shown. Starting with data collected since April 2023, the limit shown is the method reporting limit.

Table B2: Field Parameters and Natural Attenuation Results - 2014-2025

Well ID	Sample Date	Field Measured Parameters							Laboratory Analytical			
		pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
Units:		*su*	µ*S/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-02	05-29-2014	7.16	1,215	2.49	**17.58**	146.3	**1.16**	**13.8**	**100**	**537**	0.0050 U	0.0010 U
	10-29-2014	6.85	1,578	1.07	17.51	91.6	**1.33**	**2.6**	**140**	**730**	**0.011**	0.0010 U
	06-04-2015	6.84	1,018	2.21	17.97	-66.6	**0.53**	**0.1**	**107**	**558**	0.0050 U	0.0010 U
	09-28-2015	6.91	1,467	1.77	17.60	-7.0	-	**1.7**	**167**	**711**	0.0050 U	**0.0242**
	08-29-2016	7.38	1,400	1.74	19.89	94.0	-	-	**110**	-	0.020 U	0.0050 U
	12-05-2016	6.63	1,050	6.16	15.80	282.0	-	-	**89**	**400**	-	0.0050 U
	10-24-2017	7.34	1,270	8.93	17.58	112.0	0.02 U	**9.7**	**110**	**350**	0.020 U	**0.0083**
	06-14-2018	6.84	1,160	3.40	22.39	178.0	**0.96**	**11.0**	**110**	**400**	0.020 U	0.0050 U
	12-02-2018	7.54	1,680	4.81	13.55	206.0	**0.15**	**10.8**	**92**	**680**	0.0017 U	**0.022**
	06-26-2019	6.93	1,400	-	17.80	115.0	**0.12**	**17.9**	**120**	**560**	**0.0066 J**	0.0017 U
	12-11-2019	7.00	1,540	1.55	13.57	120.0	0.02 U	**16.8**	**110**	**530**	0.0017 U	0.00050 U
	06-24-2020	6.91	1,420	2.27	29.34	97.0	**0.02**	**12.7**	**110**	**560**	0.0017 U	0.00050 U
	12-15-2020	7.72	1,319	2.37	15.25	109.4	**0.82**	**5.4**	**100**	**540**	**0.0022 J**	0.00050 U
	05-25-2021	7.45	1,450	3.05	21.30	87.0	**0.02**	**11.4**	**97.9**	**692**	**0.00178 J**	0.00291 U
	10-26-2021	7.31	1,180	0.00	17.79	133.0	0.02 U	**3.3**	**98.6**	**430**	0.00086 U	0.00291 U
	11-03-2022	8.22	1,380	0.18	15.60	74.0	0.02 U	**> 30**	**97.9**	**509**	**0.00190 J**	0.00291 U
	04-26-2023	7.00	1,379	3.24	16.26	183.9	0.02 U	**14.6**	**86.4**	**541 J**	0.0100 U	0.0100 U
	10-12-2023	7.35	1,460	3.68	15.72	155.0	**0.01**	**11.2**	**88.3 J**	**671 J**	0.0100 U	0.0100 U
	03-12-2024	7.23	1,116	4.65	15.90	104.0	0.02 U	**10.9**	**79.1 J**	**488 J**	0.0100 U	0.0100 U
	04-17-2025	7.06	853	0.80	15.70	413.9	0.02 U	**>30**	**129**	**274**	**0.0378**	0.0100 U
MW-03	05-28-2014	7.15	1,053	-	18.12	-105.6	-	-	-	-	-	-
	10-30-2014	6.91	1,136	0.84	17.28	-144.7	-	-	-	-	-	-
	06-04-2015	6.82	1,353	0.95	18.61	-154.0	-	-	-	-	-	-
	09-29-2015	6.82	1,174	1.01	17.51	-174.4	-	-	-	-	-	-
	08-30-2016	7.13	1,190	2.42	18.13	-153.0	-	-	-	-	-	-
	12-02-2016	6.86	963	3.24	16.06	36.0	-	-	-	-	-	-
	05-16-2017	7.27	996	0.82	17.01	-37.0	-	-	-	-	-	-
	10-25-2017	7.41	1,200	4.01	17.58	-105.0	-	-	-	-	-	-
	06-14-2018	6.70	1,030	2.75	19.46	42.0	-	-	-	-	-	-
	12-04-2018	7.56	1,280	8.82	16.31	-65.0	-	-	**29**	**520**	**0.96**	**1.7**
	06-26-2019	6.99	1,030	-	18.20	-120.0	**1.71**	**2.7**	**32**	**470**	**0.80**	**2.1**
	12-11-2019	7.22	1,310	0.83	14.47	-192.0	**1.28**	**1.3**	**63**	**450 J**	**0.81**	**0.50**
	06-24-2020	7.02	1,220	0.96	22.25	-100.0	**1.9**	**1.9**	**61**	**450**	**0.66**	**0.063**
	12-16-2020	7.60	1,274	1.30	16.10	-94.2	**1.11**	0.3 U	**49**	**500**	**0.77**	**1.1**
	05-27-2021	7.09	1,410	0.00	17.02	-93.0	**1.27**	**1.5**	**37.7**	**557**	**0.719**	**1.92**
	10-25-2021	7.07	1,350	1.05	16.79	-88.0	**2.72**	**2.9**	**27.5**	**648**	**0.862**	**2.74**
	11-02-2022	7.20	1,190	0.00	15.67	-98.0	**2.79**	**0.7**	**45.2**	**544**	**0.697**	**0.869**
	04-25-2023	7.34	1,367	0.49	16.06	-150.2	**0.66**	0.3 U	**71.2**	**455 J**	**0.580**	**0.336**
	10-11-2023	7.30	1,310	2.56	16.84	-123.0	**2.78**	**3.7**	**27.9**	**595 J**	**0.734**	**2.07**
	03-12-2024	7.08	1,037	0.54	15.60	-66.0	**1.32**	0.3 U	**52.7**	**479 J**	**0.644**	**1.38**
	04-15-2025	7.18	701	2.76	17.50	-77.3	**0.12**	**25.1**	**112**	**229**	**0.0211**	0.0100 U

Table B2: Field Parameters and Natural Attenuation Results - 2014-2025

Well ID	Sample Date	Field Measured Parameters							Laboratory Analytical			
		pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
Units:		*su*	µ*S/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-04	05-28-2014	7.68	728	-	17.78	82.2	-	-	-	-	-	-
	10-28-2014	7.38	741	7.75	16.90	36.0	-	-	-	-	-	-
	06-03-2015	7.40	751	8.28	17.76	-23.6	-	-	-	-	-	-
	09-28-2015	-	-	-	-	-	-	-	-	-	-	-
	08-30-2016	8.36	813	7.34	18.32	59.0	-	-	-	-	-	-
	12-05-2016	-	-	-	-	-	-	-	-	-	-	-
	05-15-2017	7.99	861	7.78	17.90	-27.0	-	-	-	-	-	-
	06-13-2018	7.49	813	7.56	20.99	161.0	-	-	-	-	-	-
	06-26-2019	7.40	962	6.62	19.15	150.0	-	-	-	-	-	-
	06-23-2020	7.57	1,050	9.28	19.38	84.0	-	-	-	-	-	**0.00099 J**
	05-25-2021	7.60	1,120	7.74	17.46	165.0	-	-	-	-	-	-
	04-25-2023	7.77	1,027	8.27	16.12	27.4	0.02 U	**9.6**	**115**	**190 J**	0.0100 U	0.0100 U
	10-13-2023	7.59	947	6.15	15.89	172.0	**0.02**	**28.6**	**109**	**195 J**	0.0100 U	0.0100 U
	03-14-2024	7.76	909	8.29	15.90	156.0	**0.02**	**> 30**	**107**	**189 J**	0.0100 U	0.0100 U
	10-02-2024	7.02	1,030	5.39	17.67	173.0	**0.03**	**21.0**	**117**	**194 J**	0.0100 U	0.0100 U
	04-15-2025	7.58	682	8.30	15.90	-33.9	0.02 U	**8.5**	**119**	**193**	0.0100 U	0.0100 U
MW-06	05-29-2014	7.93	95	8.78	15.40	127.1	0.02 U	**18.5**	**110**	**252**	0.0050 U	0.0010 U
	10-29-2014	7.43	817	6.79	19.45	84.7	**0.4**	0.3 U	**100**	**185**	0.0050 U	0.0010 U
	06-03-2015	7.53	744	8.59	17.18	-44.8	0.02 U	0.3 U	**107**	**169**	0.0050 U	**0.00168**
	09-28-2015	7.53	812	6.76	19.23	-8.5	-	**15.7**	**108**	**189**	0.0050 U	0.0010 U
	08-30-2016	8.30	836	7.39	18.88	110.0	-	-	**100**	-	0.020 U	0.0050 U
	12-05-2016	6.83	851	6.84	14.54	207.0	-	-	**93**	**170**	0.020 U	0.0050 U
	05-16-2017	8.06	824	7.89	14.65	66.0	-	-	**96**	**150**	0.020 U	**0.0085**
	10-23-2017	7.61	863	9.32	19.68	186.0	0.02 U	0.04 U	**98**	**180**	0.020 U	0.0050 U
	06-11-2018	7.38	828	8.38	20.69	156.0	0.02 U	**8.09**	**96 J**	**150**	0.020 U	0.0050 U
	12-02-2018	7.98	963	7.86	18.65	241.0	0.02 U	**> 30**	**100**	**170**	**0.0021 J**	0.0017 U
	06-26-2019	7.54	831	-	17.70	121.0	0.02 U	**14.7**	**100**	**140**	0.0050 U	0.0017 U
	12-10-2019	7.69	1,070	9.47	14.60	10.0	0.02 U	**9.2**	**110**	**160**	0.0017 U	0.0010 U
	06-23-2020	7.55	1,080	9.05	19.09	103.0	**0.11**	**8.1**	**110**	**160**	0.0017 U	0.00050 U
	12-16-2020	7.88	2,036	8.38	16.20	92.0	0.02 U	**17.4**	**110**	**150**	0.0017 U	0.00050 U
	05-24-2021	7.60	1,190	5.53	20.50	102.0	**0.04**	**18.3**	**107**	**164**	0.00086 U	**0.0133**
	10-26-2021	7.60	1,120	0.00	18.59	174.0	**0.47**	**7.8**	**119**	**179**	0.00086 U	0.00291 U
	11-02-2022	8.40	984	7.99	17.31	105.0	**0.11**	**5.5**	**119**	**348**	**0.0487**	**0.0200**
	04-25-2023	7.58	1,137	10.04	15.12	148.4	0.02 U	**8.2**	**110**	**154 J**	0.0100 U	0.0100 U
	10-10-2023	7.07	1,100	7.68	18.55	276.0	0.02 U	**3.3**	**109**	**175 J**	0.0100 U	0.0100 U
	03-13-2024	7.55	841	8.45	13.70	140.6	0.02 U	0.3 U	**112**	**162 J**	0.0100 U	0.0100 U
	10-02-2024	7.62	1,200	9.91	19.57	180.0	**0.08**	**9.4**	**113 J**	**176 J**	0.0100 U	0.0100 U
	04-16-2025	7.64	755	9.24	15.30	-31.0	0.02 U	**28.5**	**109**	**159 J**	0.0100 U	0.0100 U

Table B2: Field Parameters and Natural Attenuation Results - 2014-2025

Well ID	Sample Date	Field Measured Parameters							Laboratory Analytical			
		pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
Units:		*su*	*µS/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-07	05-28-2014	7.63	775	-	18.48	101.7	-	-	-	-	-	-
	10-29-2014	7.48	773	7.43	16.81	84.1	-	-	-	-	-	-
	06-03-2015	7.10	843	6.78	18.03	-1.8	-	-	-	-	-	-
	09-28-2015	7.10	798	7.40	17.31	-6.4	-	**6.0**	**103**	**203**	**0.0086**	0.0010 U
	08-30-2016	7.96	964	6.92	19.01	94.0	-	-	-	-	-	-
	12-05-2016	7.06	839	7.90	15.85	165.0	-	-	-	-	-	-
	05-15-2017	7.62	863	6.10	17.30	35.0	-	-	-	-	-	-
	10-24-2017	7.83	918	7.73	17.67	145.0	-	-	-	-	-	-
	06-13-2018	7.25	837	6.58	22.15	182.0	-	-	-	-	-	-
	12-04-2018	8.02	976	8.26	13.19	173.0	-	-	-	-	-	-
	06-26-2019	7.42	1,190	4.35	21.12	166.0	-	-	-	-	-	-
	12-11-2019	7.36	1,050	5.38	14.10	107.0	-	-	-	-	-	-
	06-23-2020	7.31	1,030	8.37	21.48	94.0	-	-	-	-	-	-
	12-14-2020	7.66	979	8.02	15.20	132.0	-	-	-	-	-	-
	05-25-2021	7.40	1,200	6.20	16.48	180.0	-	-	-	-	-	-
	10-27-2021	7.61	1,050	0.47	17.21	186.0	-	-	-	-	-	-
	11-02-2022	7.48	912	4.98	15.50	179.0	-	-	-	-	-	-
	04-25-2023	7.66	1,055	8.00	16.67	67.1	0.02 U	**8.0**	**116**	**199 J**	0.0100 U	0.0100 U
	10-10-2023	7.77	970	0.58	16.89	133.0	**0.05**	**23.5**	**110**	**203 J**	0.0100 U	0.0100 U
	03-13-2024	7.66	926	8.05	16.60	116.1	0.02 U	**28.6**	**109**	**197 J**	0.0100 U	0.0100 U
	10-02-2024	7.00	1,000	9.84	16.75	234.0	0.02 U	**5.4**	**120**	**236 J**	0.0100 U	0.0100 U
	04-17-2025	7.52	684	8.04	16.80	-49.2	0.02 U	**23.6**	**118**	**199 J**	0.0100 U	0.0100 U
MW-08	05-28-2014	7.70	755	-	17.50	89.5	**0.59**	**16.8**	**110**	**242**	0.0050 U	0.0010 U
	10-29-2014	7.37	774	7.05	17.34	75.3	0.02 U	**18.4**	**100**	**190**	0.0072 U	0.0010 U
	06-03-2015	7.39	778	7.38	17.90	-42.7	0.02 U	**16.7**	**108**	**185**	0.0050 U	0.0010 U
	09-28-2015	-	-	-	-	-	-	-	-	-	-	-
	08-30-2016	7.72	843	5.29	19.46	143.0	-	-	**100**	-	0.020 U	0.0050 U
	12-05-2016	-	-	-	-	-	-	-	-	-	-	-
	05-17-2017	7.88	869	5.68	17.96	28.0	-	-	**100**	**170**	0.020 U	0.0050 U
	06-11-2018	7.28	866	7.46	19.77	175.0	0.02 U	**> 30**	**120**	**180**	0.020 U	0.0050 U
	06-26-2019	7.58	848	-	18.29	116.0	-	-	-	-	-	-
	06-23-2020	7.46	925	5.11	25.04	107.0	0.02 U	**15.9**	**130**	**180**	0.0017 U	**0.00062 J**
	05-26-2021	7.56	1,140	7.16	17.73	153.0	**0.06**	**> 30**	-	-	-	-
	04-25-2023	7.52	1,044	8.54	16.77	110.8	0.02 U	**15.0**	**117**	**195 J**	0.0100 U	0.0100 U
	10-11-2023	7.88	969	2.77	17.09	156.0	**0.02**	**24.3**	**110**	**200 J**	0.0100 U	0.0100 U
	03-13-2024	7.50	803	7.39	15.80	148.8	0.02 U	0.3 U	**118**	**196 J**	0.0100 U	0.0100 U
	10-02-2024	7.01	1,060	5.91	18.76	165.0	**0.01**	**21.6**	**120**	**195 J**	0.0100 U	0.0100 U
	04-15-2025	7.51	689	7.96	16.90	-21.5	0.02 U	**13.7**	**117**	**203**	0.0100 U	0.0100 U

Table B2: Field Parameters and Natural Attenuation Results - 2014-2025

Well ID	Sample Date	Field Measured Parameters							Laboratory Analytical			
		pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
Units:		*su*	*µS/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-10	05-28-2014	7.65	764	-	17.91	137.6	-	-	-	-	-	-
	10-29-2014	7.40	769	7.45	17.02	80.6	-	-	-	-	-	-
	06-03-2015	7.29	780	7.32	17.90	-34.4	-	-	-	-	-	-
	09-28-2015	-	-	-	-	-	-	-	-	-	-	-
	08-30-2016	8.28	831	5.40	18.26	100.0	-	-	-	-	-	-
	12-05-2016	-	-	-	-	-	-	-	-	-	-	-
	05-15-2017	7.39	888	6.24	17.41	29.0	-	-	-	-	-	-
	06-13-2018	7.35	730	4.96	28.26	178.0	-	-	-	-	-	-
	06-26-2019	7.60	1,010	6.38	18.25	155.0	-	-	-	-	-	-
	06-23-2020	7.40	1,040	7.45	20.04	91.0	-	-	-	-	-	-
	05-25-2021	7.71	1,040	6.67	16.54	100.0	-	-	-	-	-	-
	04-25-2023	7.53	1,055	7.91	16.43	86.3	0.02 U	**9.6**	**117**	**200 J**	0.0100 U	0.0100 U
	10-10-2023	7.70	974	0.19	15.95	121.0	**0.04**	**26.3**	**110**	**193 J**	0.0100 U	0.0100 U
	03-13-2024	7.69	929	8.06	16.20	133.9	0.02 U	**20.9**	**112**	**194 J**	0.0100 U	0.0100 U
	10-02-2024	7.33	945	7.03	18.07	207.0	**0.04**	**12.8**	**118**	**191 J**	0.0100 U	0.0100 U
	04-17-2025	7.55	683	8.12	15.60	-39.5	0.02 U	**8.2**	**120**	**182 J**	0.0100 U	0.0100 U
MW-11	05-29-2014	7.20	889	1.08	19.27	102.7	-	-	-	-	-	-
	10-30-2014	6.96	932	1.12	18.47	89.0	-	-	-	-	-	-
	06-04-2015	6.89	916	0.94	18.97	-49.8	-	-	-	-	-	-
	09-29-2015	6.89	914	0.89	18.40	-15.4	-	-	-	-	-	-
	08-29-2016	7.32	952	2.67	19.99	148.0	-	-	-	-	-	-
	12-05-2016	6.70	933	1.73	17.14	204.0	-	-	-	-	-	-
	05-16-2017	7.44	949	4.79	17.41	46.0	-	-	-	-	-	-
	10-25-2017	7.37	1,040	7.49	18.57	154.0	-	-	-	-	-	-
	06-14-2018	6.71	956	3.35	21.77	198.0	-	-	-	-	-	-
	12-02-2018	7.48	1,140	5.47	15.49	231.0	-	-	-	-	-	-
	06-27-2019	6.98	1,290	1.70	17.37	213.0	-	-	-	-	-	-
	12-11-2019	7.21	1,100	2.97	15.90	34.0	-	-	-	-	-	-
	06-24-2020	6.95	1,380	0.00	20.84	83.0	-	-	-	-	-	-
	12-15-2020	7.43	1,154	2.73	15.93	133.1	-	-	-	-	-	-
	05-25-2021	7.23	1,120	1.77	18.78	122.0	-	-	-	-	-	-
	10-27-2021	7.13	1,070	0.00	17.33	189.0	-	-	-	-	-	-
	11-02-2022	6.94	952	0.43	16.08	167.0	-	-	-	-	-	-
	04-26-2023	6.89	1,079	5.08	16.65	196.1	0.02 U	**16.5**	**109**	**261 J**	**0.0731**	0.0100 U
	10-12-2023	7.33	1,050	3.52	17.43	174.0	**0.03**	**19.6**	**98.9**	**298 J**	**0.113**	0.0100 U
	03-12-2024	6.81	890	3.17	15.90	134.5	0.02 U	0.3 U	**103**	**298 J**	**0.0975**	0.0100 U
	04-15-2025	7.05	972	2.22	17.40	456.4	0.02 U	**28.4**	**108**	**276**	**0.269**	0.0100 U

Table B2: Field Parameters and Natural Attenuation Results - 2014-2025

Well ID	Sample Date	Field Measured Parameters							Laboratory Analytical			
		pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
Units:		*su*	*µS/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-12	05-29-2014	7.22	993	1.81	19.82	-27.5	-	**9.2**	**110**	**309**	**0.27**	**0.0142**
	10-30-2014	6.82	1,135	2.55	16.73	-50.6	**4.68**	0.3 U	**110**	**350**	**0.28**	**0.087**
	06-04-2015	6.82	1,017	2.17	18.40	-74.5	**0.34**	**10.4**	**113**	**312**	**0.201**	0.0010 U
	09-29-2015	6.82	1,124	1.15	16.49	-63.7	-	**7.0**	**107**	**367**	**0.252**	**0.0362**
	08-29-2016	7.45	1,290	1.10	19.42	-10.0	-	-	**83**	-	**0.25**	**0.76**
	12-06-2016	6.80	993	3.22	14.52	121.0	-	-	**-**	**270**	**0.19**	**0.063**
	05-16-2017	7.96	965	3.93	15.97	36.0	-	-	**100**	**240**	**0.16**	**0.012**
	10-24-2017	7.50	1,100	3.39	17.70	49.0	0.02 U	**10.5**	**98**	**270**	**0.19**	**0.090**
	06-14-2018	6.57	1,120	1.95	18.69	212.0	0.02 U	**23.8**	**120**	**290**	**0.043**	0.0050 U
	12-03-2018	7.57	1,360	5.67	13.71	176.0	0.02 U	**16.4**	**130**	**370**	**0.074**	0.0017 U
	06-27-2019	6.97	1,110	-	15.90	164.0	**0.09**	**4.7**	**120 J**	**340**	**0.10**	**0.026**
	12-11-2019	7.29	1,300	3.22	12.59	15.0	0.02 U	**7.0**	**140**	**290 J**	**0.076**	**0.0015 J**
	06-24-2020	6.76	1,410	0.00	22.66	114.0	**0.11**	**4.3**	**140**	**430**	**0.12**	**0.0064**
	12-16-2020	7.59	1,273	3.16	15.10	121.4	0.02 U	**7.2**	**140**	**360**	**0.14**	**0.0037**
	05-27-2021	7.44	1,440	0.19	16.49	141.0	**0.06**	**12.4**	**114**	**513**	**0.0963**	**0.0386**
	10-27-2021	7.26	1,310	0.00	16.54	189.0	**0.16**	**0.5**	**123**	**365**	0.00086 U	**0.0190**
	11-02-2022	7.06	1,080	1.33	14.93	196.0	**0.02**	**0.8**	**122**	**179**	0.00093 U	0.00291 U
	04-26-2023	7.10	1,193	3.69	15.73	174.9	0.02 U	**4.5**	**113**	**321 J**	**0.0559**	0.0100 U
	10-12-2023	7.13	1,440	0.98	16.69	270.0	0.02 U	0.3 U	**96.2**	**507 J**	**0.0357**	0.0100 U
	03-12-2024	7.05	977	2.38	15.00	79.9	0.02 U	0.3 U	**108 J**	**387 J**	**0.0859**	0.0100 U
	04-16-2025	6.97	1,064	2.55	16.70	415.6	0.02 U	**25.7**	**113 J**	**363 J**	**0.0714**	**0.0187**
MW-14	05-29-2014	7.53	795	5.70	17.69	101.4	-	-	**-**	-	-	-
	10-29-2014	7.23	805	5.65	17.81	105.4	-	-	**-**	-	-	-
	06-04-2015	7.39	784	6.22	17.02	-46.6	-	-	**-**	-	-	-
	08-29-2016	7.71	877	5.19	18.76	120.0	-	-	**-**	-	-	-
	12-05-2016	6.97	855	6.29	15.43	178.0	-	-	**-**	-	-	-
	05-17-2017	7.71	923	3.02	17.44	46.0	-	-	**-**	-	-	-
	10-24-2017	7.70	932	6.18	17.69	144.0	-	-	**-**	-	-	-
	12-02-2018	7.87	1,010	7.32	15.75	222.0	-	-	**-**	-	-	-
	06-27-2019	7.54	1,180	3.44	16.30	160.0	-	-	**-**	-	-	-
	12-11-2019	7.21	1,020	4.27	14.38	107.0	-	-	**-**	-	-	-
	06-24-2020	7.24	1,060	4.61	20.61	116.0	-	-	**-**	-	-	-
	12-15-2020	7.90	1,032	7.28	16.10	111.3	-	-	**-**	-	-	-
	05-25-2021	7.58	1,090	5.21	17.23	83.0	-	-	**-**	-	-	-
	10-26-2021	7.51	1,060	0.00	17.20	184.0	-	-	**-**	-	-	-
	11-03-2022	8.43	916	4.26	15.50	110.0	-	-	**-**	-	-	-
	04-26-2023	7.29	1,052	7.96	16.24	202.3	0.02 U	**18.6**	**119**	**207 J**	0.0100 U	0.0100 U
	10-12-2023	7.36	1,030	5.94	16.72	278.0	**0.1**	**13.0**	**113**	**226 J**	0.0100 U	0.0100 U
	03-12-2024	7.53	953	6.97	15.20	158.0	**0.06**	**6.9**	**113**	**209 J**	0.0100 U	0.0100 U
	10-02-2024	6.91	1,130	3.99	17.91	164.0	0.02 U	**18.2**	**124**	**240 J**	0.0100 U	0.0100 U
	04-15-2025	7.32	870	6.78	16.30	464.1	0.02 U	**>30**	**119**	**211 J**	0.0100 U	0.0100 U

Table B2: Field Parameters and Natural Attenuation Results - 2014-2025

Well ID	Sample Date	Field Measured Parameters							Laboratory Analytical			
		pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
Units:		*su*	µ*S/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-15	12-03-2018	8.02	950	6.16	16.03	178.0	-	-	**-**	-	-	-
	06-26-2019	7.60	990	4.44	18.75	168.0	-	-	**-**	-	-	-
	12-10-2019	7.37	1,070	4.99	12.99	63.0	-	-	**-**	-	-	-
	06-23-2020	7.38	904	4.46	27.69	108.0	-	-	**-**	-	-	-
	12-14-2020	7.92	1,017	6.74	15.00	92.8	-	-	**-**	-	-	-
	05-25-2021	7.51	1,180	5.92	16.67	170.0	-	-	**-**	-	-	-
	10-25-2021	7.52	1,040	0.00	19.38	171.0	-	-	**-**	-	-	-
	11-02-2022	8.36	914	5.54	16.82	91.0	-	-	**-**	-	-	-
	04-25-2023	7.38	1,052	7.52	15.95	166.7	0.02 U	**8.6**	**119**	**204 J**	0.0100 U	0.0100 U
	10-10-2023	7.01	998	5.16	17.52	302.0	0.02 U	0.3 U	**109**	**218 J**	0.0100 U	0.0100 U
	03-13-2024	7.41	807	6.29	15.60	132.3	0.02 U	**0.5**	**113**	**206 J**	0.0100 U	0.0100 U
	10-02-2024	7.59	1,020	8.83	20.05	164.0	**0.06**	**4.4**	**117**	**213 J**	0.0100 U	0.0100 U
	04-16-2025	7.49	695	7.08	16.70	-48.7	0.02 U	**>30**	**117**	**205 J**	0.0100 U	0.0100 U
MW-16	12-03-2018	8.04	949	6.37	16.40	186.0	-	-	**-**	-	-	-
	06-26-2019	7.58	1,020	4.48	18.08	166.0	-	-	**-**	-	-	-
	12-10-2019	7.62	1,010	6.11	15.28	-73.0	0.02 U	**8.4**	**120**	**190 J**	0.0017 U	**0.0029**
	06-22-2020	7.18	1,040	4.09	22.10	80.0	**0.03**	**15.7**	**130**	**180**	0.0017 U	0.00050 U
	12-16-2020	7.99	1,026	6.62	16.20	69.3	0.02 U	**17.1**	**130**	**190**	0.0017 U	0.00050 U
	05-25-2021	7.46	1,150	4.56	18.87	151.0	0.02 U	**26.9**	**124**	**200**	**0.00120 J**	0.00291 U
	10-26-2021	7.57	1,040	0.00	16.93	173.0	**0.6**	**6.8**	**126**	**206**	0.00086 U	0.00291 U
	11-02-2022	8.42	911	3.62	15.07	94.0	**0.05**	**> 30**	**121**	**204**	0.00093 U	0.00291 U
	04-25-2023	7.46	1,051	7.29	16.49	161.1	0.02 U	**19.6**	**117**	**205 J**	0.0100 U	0.0100 U
	10-11-2023	7.61	1,000	6.26	16.56	270.0	0.02 U	**1.0**	**109 J**	**215 J**	0.0100 U	0.0100 U
	03-13-2024	7.40	812	6.35	15.80	143.0	0.02 U	**1.2**	**117**	**204 J**	0.0100 U	0.0100 U
	10-02-2024	6.93	1,080	4.31	17.93	163.0	**0.02**	**18.2**	**117**	**209 J**	0.0100 U	0.0100 U
	04-16-2025	7.46	696	7.15	17.00	-48.8	0.02 U	**5.9**	**118**	**205 J**	0.0100 U	0.0100 U
MW-17	12-03-2018	7.46	1,770	5.47	13.77	139.0	-	-	**-**	-	-	-
	06-27-2019	7.11	1,630	2.78	15.82	185.0	-	-	**-**	-	-	-
	12-11-2019	6.91	1,540	2.96	13.84	118.0	-	-	**-**	-	-	-
	06-24-2020	7.18	1,330	9.10	18.86	100.0	-	-	**-**	-	-	-
	12-15-2020	7.38	1,259	6.94	14.10	107.0	-	-	**-**	-	-	-
	05-25-2021	7.25	1,270	8.75	16.72	118.0	-	-	**-**	-	-	-
	10-26-2021	7.28	1,340	0.00	17.01	195.0	-	-	**-**	-	-	-
	11-03-2022	7.15	1,170	2.54	14.63	185.0	-	-	**-**	-	-	-
	04-26-2023	7.29	1,316	6.12	15.97	112.4	0.02 U	**12.3**	**146**	**272 J**	0.0100 U	0.0100 U
	10-12-2023	7.23	1,200	4.63	16.23	153.0	0.02 U	**27.3**	**130**	**317 J**	0.0100 U	0.0100 U
	03-13-2024	7.30	1,097	6.56	14.50	170.0	**0.03**	**20.4**	**131**	**273 J**	0.0100 U	0.0100 U
	04-16-2025	6.84	995	5.18	16.40	489.8	**0.02**	**27.1**	**139**	**345 J**	0.0100 U	0.0100 U

Table B2: Field Parameters and Natural Attenuation Results - 2014-2025

Well ID	Sample Date	Field Measured Parameters							Laboratory Analytical			
		pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
Units:		*su*	µ*S/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-18	12-04-2018	7.95	1,060	7.62	11.93	101.0	-	-	**-**	-	-	-
	06-26-2019	7.12	1,100	-	18.79	126.0	**0.12**	**23.4**	**150 J**	**220**	0.0050 U	0.0017 U
	12-12-2019	7.42	1,490	7.25	14.20	46.0	0.02 U	**15.2**	**170**	**240**	0.0017 U	**0.0043**
	06-22-2020	7.10	1,280	7.10	19.54	119.0	0.02 U	**10.7**	**160**	**210**	0.0017 U	0.00050 U
	12-15-2020	7.53	1,049	8.10	15.50	109.0	0.02 U	**16.5**	**150**	**220**	0.0017 U	0.00050 U
	05-26-2021	7.33	1,210	6.42	17.10	211.0	**0.02**	**23.6**	**131**	**214**	0.00086 U	0.00291 U
	10-26-2021	7.44	1,060	4.06	16.62	145.0	**0.28**	**25.1**	**136**	**220**	0.00086 U	0.00291 U
	11-01-2022	7.31	946	9.21	15.90	224.0	0.02 U	**5.5**	**130**	**210**	0.00093 U	0.00291 U
	04-26-2023	7.43	1,118	8.40	16.81	122.7	0.02 U	**6.2**	**123**	**221 J**	0.0100 U	0.0100 U
	10-11-2023	7.35	1,140	7.90	17.07	320.0	**0.09**	**8.2**	**119**	**242 J**	0.0100 U	0.0100 U
	03-14-2024	7.33	829	8.12	16.10	177.0	0.02 U	**2.2**	**112**	**219 J**	0.0100 U	0.0100 U
	10-03-2024	6.95	1,190	6.61	15.93	164.0	**0.03**	**13.3**	**121**	**233 J**	0.0100 U	0.0100 U
	04-16-2025	7.31	858	8.44	16.40	444.3	0.02 U	**>30**	**125**	**209 J**	0.0100 U	0.0100 U
MW-19	12-03-2018	7.44	2,040	4.76	13.11	-75.0	-	-	**-**	-	-	-
	06-27-2019	7.27	1,050	-	16.62	-121.0	**1.37**	**13.8**	**120**	**240**	**0.14**	**1.3**
	12-10-2019	7.32	1,200	7.16	16.44	-134.0	**0.14**	**14.0**	**150**	**220**	**0.079**	**0.27**
	06-24-2020	7.26	1,190	7.06	18.80	48.0	**0.02**	**13.8**	**140**	**200**	**0.028**	**0.12**
	12-16-2020	7.64	1,985	6.41	15.80	103.0	0.02 U	**16.1**	**140**	**200**	**0.0021 J**	0.00050 U
	05-26-2021	7.29	1,200	3.12	17.73	88.0	0.02 U	**20.0**	**115**	**255**	**0.0248**	**0.0724**
	10-27-2021	7.47	1,050	0.00	17.24	183.0	-	**15.7**	**123**	**219**	**0.00121 J**	0.00291 U
	11-01-2022	8.22	928	4.54	15.53	140.0	**0.32**	**5.5**	**123**	**215**	**0.00112 J**	0.00291 U
	04-26-2023	7.52	1,084	6.41	16.08	92.7	0.02 U	**9.0**	**112**	**228 J**	0.0100 U	0.0100 U
	10-11-2023	7.27	1,040	5.23	16.66	294.0	**0.09**	**8.3**	**102**	**259 J**	0.0100 U	0.0100 U
	03-12-2024	7.45	966	5.85	14.80	144.3	**0.03**	**22.8**	**107**	**245 J**	0.0100 U	0.0100 U
	04-16-2025	7.14	968	2.48	17.10	-78.9	0.08 U	**5.2**	250 U	**393 J**	0.0100 U	**0.273**
MW-20	12-12-2019	7.89	993	6.36	15.70	7.0	0.02 U	**21.5**	**130**	**170 J**	**0.012 J**	0.00050 U
	06-22-2020	7.53	1,010	7.95	20.41	93.0	**0.08**	**9.8**	**130**	**170**	0.0017 U	**0.00075 J**
	12-16-2020	7.91	1,905	8.04	15.70	89.0	**0.02**	**5.7**	**140**	**160**	**0.0019 J**	0.00050 U
	05-26-2021	7.29	1,200	3.12	17.54	179.0	0.02 U	**> 30**	**124**	**185**	0.00086 U	0.00291 U
	10-26-2021	7.69	978	4.01	14.95	131.0	0.02 U	**> 30**	**129**	**181**	0.00086 U	0.00291 U
	11-01-2022	7.56	889	6.83	15.88	214.0	**0.06**	**5.5**	**127**	**185**	0.00093 U	0.00291 U
	04-26-2023	7.57	1,061	8.39	16.90	126.5	0.02 U	**11.6**	**120**	**192 J**	0.0100 U	0.0100 U
	10-11-2023	7.56	996	8.35	17.38	315.0	0.02 U	**8.1**	**114**	**188 J**	0.0100 U	0.0100 U
	03-14-2024	7.58	800	8.00	15.70	142.8	0.02 U	**0.9**	**113**	**191 J**	0.0100 U	0.0100 U
	10-03-2024	7.49	1,030	9.99	15.74	147.0	**0.05**	**6.5**	**123**	**187 J**	0.0100 U	0.0100 U
	04-16-2025	7.61	688	8.37	17.00	-33.8	0.05 U	**20.9**	**125**	**198 J**	0.0100 U	0.0100 U
MW-21	12-12-2019	7.71	1,020	6.25	14.21	108.0	0.02 U	**20.2**	**130**	**170**	0.0017 U	0.00050 U
	06-22-2020	7.54	1,070	7.27	18.57	78.0	**0.1**	**> 30**	**130**	**160**	0.0017 U	0.00050 U
	12-15-2020	7.85	1,974	8.12	14.90	103.0	0.02 U	**20.6**	**150**	**170**	0.0017 U	0.00050 U
	05-26-2021	7.81	1,020	7.97	17.59	146.0	**0.08**	**12.4**	**124**	**189**	0.00086 U	0.00291 U
	10-27-2021	7.63	967	3.81	16.37	182.0	**0.07**	**9.9**	**128**	**183**	0.00086 U	0.00291 U
	11-02-2022	8.59	910	6.80	15.43	109.0	0.02 U	**> 30**	**128**	**188**	**0.00148 J**	0.00291 U
	04-25-2023	7.66	1,064	8.40	16.18	85.9	0.02 U	**7.4**	**116**	**195 J**	0.0100 U	0.0100 U
	10-12-2023	7.44	1,010	8.09	16.08	315.0	0.02 U	**5.9**	**116**	**193 J**	0.0100 U	0.0100 U
	03-14-2024	7.57	807	8.03	15.80	159.9	0.02 U	**0.9**	**111**	**192 J**	0.0100 U	0.0100 U
	10-01-2024	8.29	1,070	7.82	17.42	143.0	**0.66**	**> 30**	**125**	**190 J**	0.0100 U	0.0100 U
	04-16-2025	7.47	830	8.27	16.30	479.3	0.02 U	**>30**	**128**	**199 J**	0.0100 U	0.0100 U

Table B2: Field Parameters and Natural Attenuation Results - 2014-2025

Well ID	Sample Date	Field Measured Parameters							Laboratory Analytical			
		pH	Conductivity	Dissolved Oxygen	Temperature	ORP	Ferrous Iron	Nitrate	Sulfate	Alkalinity	Manganese (Dissolved)	Methane
Units:		*su*	*µS/cm*	*mg/L*	*deg C*	*mV*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
MW-22	12-11-2019	7.50	1,050	5.69	14.61	102.0	**0.04**	**25.0**	**140**	**170 J**	0.0017 U	**0.00075 J**
	06-23-2020	7.62	992	6.57	21.61	107.0	**0.09**	**7.4**	**130**	**170**	0.0017 U	0.00050 U
	12-15-2020	7.85	1,978	8.17	15.80	92.0	0.02 U	**12.3**	**150**	**170**	0.0017 U	0.00050 U
	05-26-2021	7.89	999	7.46	18.68	125.0	**0.25**	**27.7**	**127**	**189**	0.00086 U	0.00291 U
	10-27-2021	7.76	1,030	0.78	16.90	179.0	**0.04**	**13.9**	**129**	**179**	0.00086 U	0.00291 U
	11-02-2022	7.58	868	6.61	15.61	199.0	0.02 U	**5.5**	**124**	**187**	0.00093 U	0.00291 U
	04-25-2023	7.76	1,006	9.06	16.19	87.1	0.02 U	**16.1**	**110**	**196 J**	0.0100 U	0.0100 U
	10-13-2023	7.41	966	8.38	16.38	302.0	**0.09**	**5.4**	**108**	**194 J**	0.0100 U	0.0100 U
	03-14-2024	7.76	908	8.29	16.10	145.0	0.02 U	**> 30**	**111**	**190 J**	0.0100 U	0.0100 U
	10-01-2024	8.39	976	7.00	20.74	149.0	**0.03**	**15.4**	**115**	**190 J**	0.0100 U	0.0100 U
	04-15-2025	7.59	677	8.45	16.60	-39.0	**0.06**	**>30**	**122**	**188 J**	0.0100 U	0.0100 U
MW-23	12-11-2019	7.75	1,020	5.90	15.06	12.0	0.02 U	**6.5**	**130**	**170**	**0.042**	0.00050 U
	06-23-2020	7.56	1,100	8.01	17.51	84.0	**0.10**	**> 30**	**130**	**180**	0.0017 U	0.00050 U
	12-15-2020	8.11	1,062	8.33	16.60	116.1	**0.03**	**20.5**	**150**	**170**	0.0017 U	0.00050 U
	05-26-2021	7.58	1,180	6.25	18.69	158.0	**0.07**	**28.0**	**129**	**186**	0.00086 U	0.00291 U
	10-27-2021	7.70	1,060	0.80	17.14	183.0	0.02 U	**25.7**	**133**	**189**	0.00086 U	0.00291 U
	11-03-2022	7.53	873	5.58	15.46	190.0	**0.02**	**5.0**	**124**	**190**	0.00093 U	0.00291 U
	04-24-2023	7.62	1,019	8.69	16.51	46.4	0.02 U	**19.3**	**110**	**196 J**	0.0100 U	0.0100 U
	10-12-2023	7.52	987	6.37	18.94	290.0	**0.08**	**8.0**	**109**	**197 J**	0.0100 U	0.0100 U
	03-14-2024	7.73	905	7.88	16.50	128.7	0.02 U	**23.7**	**106**	**193 J**	0.0100 U	0.0100 U
	10-01-2024	7.17	902	9.30	17.61	179.0	**0.03**	**17.1**	**112**	**192 J**	0.0100 U	0.0100 U
	04-16-2025	7.58	690	7.67	16.10	-41.9	0.02 U	**16.6**	**125**	**196**	0.0100 U	0.0100 U

Notes:
Values in bold were reported as detected.
- = not analyzed or sample not collected

Acronyms:
deg C = degrees Celsius
J = estimated concentration
mg/L = milligrams per liter
mS/cm = millisiemens per centimeter
µS/cm = microsiemens per centimeter
mV = millivolts
ORP = Oxidation Reduction Potential
su = Standard Unit
U = analyte not detected above limit shown. Starting with data collected since April 2023, the limit shown is the method reporting limit.

ATTACHMENT C

Laboratory Report and Chain-of-Custody Form

ANALYTICAL REPORT

April 30, 2025

AECOM - Portland, OR

Sample Delivery Group:	L1849608
Samples Received:	04/18/2025
Project Number:	60746115
Description:	Marathon Pasco Terminal - 1SA 2025

Report To:

Ms. Nicky Moody
888 SW 5th Ave
Suite 600
Portland, OR 97204

Entire Report Reviewed By:

Craig Cothron
Project Manager

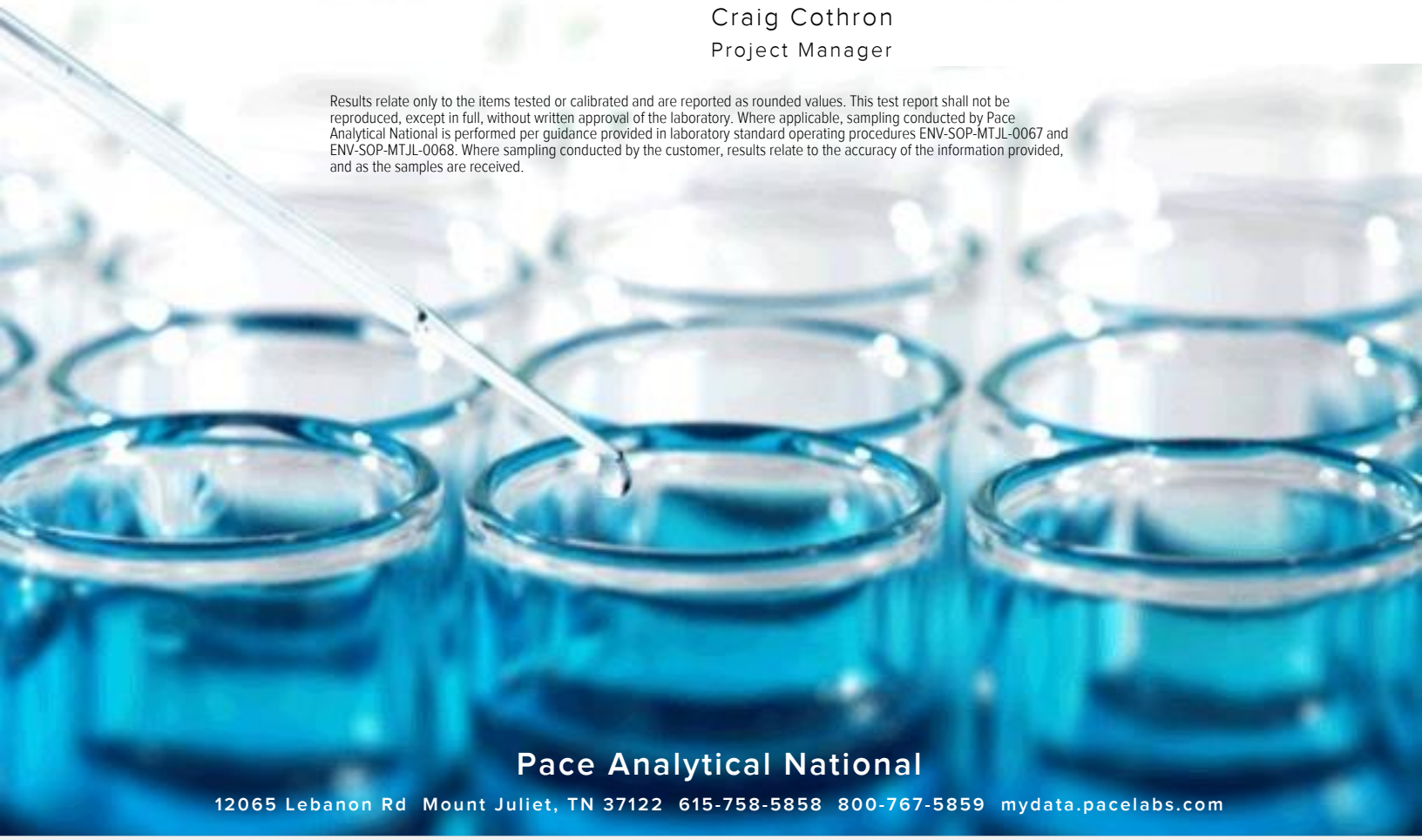


TABLE OF CONTENTS

MW-02-20250417 L1849608-01 GW

Collected by: Jackson Long | Collected date/time: 04/17/25 09:35 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:19	04/19/25 10:19	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 13:47	04/23/25 13:47	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:22	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2495536	1	04/20/25 12:41	04/20/25 12:41	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2497385	1	04/23/25 15:14	04/23/25 15:14	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 04:12	04/21/25 04:12	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498000	1	04/25/25 00:59	04/25/25 12:25	MAA	Mt. Juliet, TN

MW-03-20250415 L1849608-02 GW

Collected by: Jackson Long | Collected date/time: 04/15/25 14:55 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:32	04/19/25 10:32	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 14:00	04/23/25 14:00	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:30	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2495536	1	04/20/25 17:36	04/20/25 17:36	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2495730	1	04/22/25 11:49	04/22/25 11:49	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 04:32	04/21/25 04:32	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498000	1	04/25/25 00:59	04/25/25 12:45	MAA	Mt. Juliet, TN

MW-04-20250415 L1849608-03 GW

Collected by: Jackson Long | Collected date/time: 04/15/25 09:40 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494627	1	04/19/25 09:17	04/19/25 09:17	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 14:14	04/23/25 14:14	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:33	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2495536	1	04/20/25 17:59	04/20/25 17:59	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2495730	1	04/22/25 11:54	04/22/25 11:54	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 04:52	04/21/25 04:52	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498000	1	04/25/25 00:59	04/25/25 13:05	MAA	Mt. Juliet, TN

MW-06-20250416 L1849608-04 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 12:20 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:36	04/19/25 10:36	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 14:54	04/23/25 14:54	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:36	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2495536	1	04/20/25 18:21	04/20/25 18:21	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 11:34	04/23/25 11:34	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 05:13	04/21/25 05:13	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498000	1	04/25/25 00:59	04/25/25 13:26	MAA	Mt. Juliet, TN

MW-07-20250417 L1849608-05 GW

Collected by: Jackson Long | Collected date/time: 04/17/25 11:00 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:40	04/19/25 10:40	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 15:07	04/23/25 15:07	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:38	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2495536	1	04/20/25 18:44	04/20/25 18:44	ADM	Mt. Juliet, TN

MW-07-20250417 L1849608-05 GW

Collected by: Jackson Long | Collected date/time: 04/17/25 11:00 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG2497385	1	04/23/25 15:17	04/23/25 15:17	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 05:33	04/21/25 05:33	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498000	1	04/25/25 00:59	04/25/25 13:46	MAA	Mt. Juliet, TN

MW-08-20250415 L1849608-06 GW

Collected by: Jackson Long | Collected date/time: 04/15/25 16:55 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:44	04/19/25 10:44	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 15:23	04/23/25 15:23	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:41	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2495536	1	04/20/25 19:06	04/20/25 19:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2495730	1	04/22/25 11:57	04/22/25 11:57	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 05:53	04/21/25 05:53	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498000	1	04/25/25 00:59	04/25/25 14:06	MAA	Mt. Juliet, TN

MW-10-20250417 L1849608-07 GW

Collected by: Jackson Long | Collected date/time: 04/17/25 09:25 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494851	1	04/20/25 12:50	04/20/25 12:50	BJM	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 15:36	04/23/25 15:36	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:44	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2495536	1	04/20/25 19:29	04/20/25 19:29	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2497385	1	04/23/25 15:20	04/23/25 15:20	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 06:13	04/21/25 06:13	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498001	1	04/23/25 17:23	04/24/25 17:35	DMG	Mt. Juliet, TN

MW-11-20250415 L1849608-08 GW

Collected by: Jackson Long | Collected date/time: 04/15/25 14:50 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:48	04/19/25 10:48	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 15:50	04/23/25 15:50	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:47	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2495536	1	04/20/25 19:51	04/20/25 19:51	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2495730	1	04/22/25 11:59	04/22/25 11:59	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 06:33	04/21/25 06:33	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498001	1	04/23/25 17:23	04/24/25 17:57	DMG	Mt. Juliet, TN

MW-12-20250416 L1849608-09 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 16:10 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494630	1	04/19/25 13:04	04/19/25 13:04	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 16:03	04/23/25 16:03	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:02	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 16:58	04/21/25 16:58	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 11:44	04/23/25 11:44	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 06:53	04/21/25 06:53	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/25/25 10:08	MAA	Mt. Juliet, TN

MW-14-20250415 L1849608-10 GW

Collected by: Jackson Long | Collected date/time: 04/15/25 16:50 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:51	04/19/25 10:51	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 16:57	04/23/25 16:57	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:49	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 17:19	04/21/25 17:19	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2495730	1	04/22/25 12:02	04/22/25 12:02	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 07:13	04/21/25 07:13	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/25/25 11:21	MAA	Mt. Juliet, TN

MW-15-20250416 L1849608-11 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 13:55 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:55	04/19/25 10:55	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 17:10	04/23/25 17:10	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:52	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 17:41	04/21/25 17:41	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 11:52	04/23/25 11:52	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 07:34	04/21/25 07:34	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 15:05	MAA	Mt. Juliet, TN

MW-16-20250416 L1849608-12 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 10:45 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 10:59	04/19/25 10:59	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494549	5	04/23/25 17:23	04/23/25 17:23	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 02:55	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 18:02	04/21/25 18:02	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 11:57	04/23/25 11:57	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 07:54	04/21/25 07:54	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 15:29	MAA	Mt. Juliet, TN

MW-17-20250416 L1849608-13 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 12:45 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 11:03	04/19/25 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494612	10	04/23/25 02:51	04/23/25 02:51	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 03:03	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 18:23	04/21/25 18:23	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 11:59	04/23/25 11:59	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 08:14	04/21/25 08:14	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 15:54	MAA	Mt. Juliet, TN

MW-18-20250416 L1849608-14 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 09:20 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494851	1	04/20/25 12:57	04/20/25 12:57	BJM	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494612	5	04/23/25 03:05	04/23/25 03:05	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 03:06	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 18:45	04/21/25 18:45	CDD	Mt. Juliet, TN

MW-18-20250416 L1849608-14 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 09:20 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 12:02	04/23/25 12:02	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 08:34	04/21/25 08:34	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 16:18	MAA	Mt. Juliet, TN

MW-19-20250416 L1849608-15 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 15:45 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 11:17	04/19/25 11:17	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494612	50	04/23/25 03:18	04/23/25 03:18	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 03:08	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 19:06	04/21/25 19:06	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 12:05	04/23/25 12:05	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 08:54	04/21/25 08:54	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 16:42	MAA	Mt. Juliet, TN

MW-20-20250416 L1849608-16 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 17:10 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 11:24	04/19/25 11:24	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494612	5	04/23/25 03:31	04/23/25 03:31	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 03:11	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 19:28	04/21/25 19:28	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 12:11	04/23/25 12:11	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 09:15	04/21/25 09:15	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 17:06	MAA	Mt. Juliet, TN

MW-21-20250416 L1849608-17 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 10:55 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 11:28	04/19/25 11:28	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494612	5	04/23/25 03:45	04/23/25 03:45	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2496283	1	04/23/25 18:46	04/25/25 03:14	JTM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 19:49	04/21/25 19:49	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 12:13	04/23/25 12:13	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 09:35	04/21/25 09:35	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 17:30	MAA	Mt. Juliet, TN

MW-22-20250415 L1849608-18 GW

Collected by: Jackson Long | Collected date/time: 04/15/25 12:10 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494630	1	04/19/25 13:11	04/19/25 13:11	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494612	5	04/23/25 03:58	04/23/25 03:58	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2499696	1	04/29/25 00:21	04/29/25 11:42	RLS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496036	1	04/21/25 20:10	04/21/25 20:10	CDD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2495730	1	04/22/25 12:07	04/22/25 12:07	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 09:55	04/21/25 09:55	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 17:54	MAA	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-23-20250416 L1849608-19 GW

Collected by: Jackson Long | Collected date/time: 04/16/25 09:15 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494632	1	04/19/25 11:32	04/19/25 11:32	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494612	10	04/23/25 04:12	04/23/25 04:12	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2499696	1	04/29/25 00:21	04/29/25 11:49	RLS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496787	1	04/22/25 13:42	04/22/25 13:42	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2496346	1	04/23/25 12:16	04/23/25 12:16	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495789	1	04/21/25 10:15	04/21/25 10:15	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 18:17	MAA	Mt. Juliet, TN

MW- 04-DUP-20250415 L1849608-20 GW

Collected by: Jackson Long | Collected date/time: 04/15/25 10:00 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2494631	1	04/19/25 09:55	04/19/25 09:55	KA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2494612	10	04/23/25 04:25	04/23/25 04:25	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2499696	1	04/29/25 00:21	04/29/25 11:50	RLS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496787	1	04/22/25 17:27	04/22/25 17:27	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2495730	1	04/22/25 12:31	04/22/25 12:31	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495818	1	04/21/25 08:52	04/21/25 08:52	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 18:41	MAA	Mt. Juliet, TN

TB-01 L1849608-21 GW

Collected by: Jackson Long | Collected date/time: 04/17/25 11:30 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496787	1	04/22/25 11:51	04/22/25 11:51	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495818	1	04/21/25 03:02	04/21/25 03:02	DYW	Mt. Juliet, TN

TB-02 L1849608-22 GW

Collected by: Jackson Long | Collected date/time: 04/17/25 11:31 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496787	1	04/22/25 12:13	04/22/25 12:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495818	1	04/21/25 03:21	04/21/25 03:21	DYW	Mt. Juliet, TN

TB-03 L1849608-23 GW

Collected by: Jackson Long | Collected date/time: 04/17/25 11:32 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496787	1	04/22/25 12:35	04/22/25 12:35	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495818	1	04/21/25 03:41	04/21/25 03:41	DYW	Mt. Juliet, TN

FIELD BLANK L1849608-24 GW

Collected by: Jackson Long | Collected date/time: 04/17/25 10:30 | Received date/time: 04/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2496787	1	04/22/25 13:20	04/22/25 13:20	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2495818	1	04/21/25 04:20	04/21/25 04:20	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2498002	1	04/25/25 00:57	04/26/25 19:05	MAA	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Craig Cothron
Project Manager

Sample Delivery Group (SDG) Narrative

Analysis was filtered in the laboratory.

Lab Sample ID	Project Sample ID	Method
L1849608-01	MW-02-20250417	6010D
L1849608-02	MW-03-20250415	6010D
L1849608-03	MW-04-20250415	6010D
L1849608-04	MW-06-20250416	6010D
L1849608-05	MW-07-20250417	6010D
L1849608-06	MW-08-20250415	6010D
L1849608-07	MW-10-20250417	6010D
L1849608-08	MW-11-20250415	6010D
L1849608-09	MW-12-20250416	6010D
L1849608-10	MW-14-20250415	6010D
L1849608-11	MW-15-20250416	6010D
L1849608-12	MW-16-20250416	6010D
L1849608-13	MW-17-20250416	6010D
L1849608-14	MW-18-20250416	6010D
L1849608-15	MW-19-20250416	6010D
L1849608-16	MW-20-20250416	6010D
L1849608-17	MW-21-20250416	6010D
L1849608-18	MW-22-20250415	6010D
L1849608-19	MW-23-20250416	6010D
L1849608-20	MW- 04-DUP-20250415	6010D
R4205113-3		6010D
R4207049-3		6010D

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	274000		20000	1	04/19/2025 10:19	WG2494632

Sample Narrative:
L1849608-01 WG2494632: Endpoint pH 4.5

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	129000		25000	5	04/23/2025 13:47	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	37.8		10.0	1	04/25/2025 02:22	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/20/2025 12:41	WG2495536
(S) a,a,a-Trifluorotoluene(FID)	*98.7*		*78.0-120*		*04/20/2025 12:41*	WG2495536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 15:14	WG2497385
Ethane	ND		13.0	1	04/23/2025 15:14	WG2497385
Ethene	ND		13.0	1	04/23/2025 15:14	WG2497385

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 04:12	WG2495789
Toluene	ND		1.00	1	04/21/2025 04:12	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 04:12	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 04:12	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 04:12	WG2495789
(S) Toluene-d8	*119*		*80.0-120*		*04/21/2025 04:12*	WG2495789
(S) 4-Bromofluorobenzene	*89.9*		*77.0-126*		*04/21/2025 04:12*	WG2495789
(S) 1,2-Dichloroethane-d4	*94.6*		*70.0-130*		*04/21/2025 04:12*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/25/2025 12:25	WG2498000
Residual Range Organics (RRO)	ND		250	1	04/25/2025 12:25	WG2498000
(S) o-Terphenyl	*92.6*		*52.0-156*		*04/25/2025 12:25*	WG2498000

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	229000		20000	1	04/19/2025 10:32	WG2494632

Sample Narrative:
L1849608-02 WG2494632: Endpoint pH 4.5

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	112000		25000	5	04/23/2025 14:00	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	21.1		10.0	1	04/25/2025 02:30	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/20/2025 17:36	WG2495536
(S) a,a,a-Trifluorotoluene(FID)	*98.6*		*78.0-120*		*04/20/2025 17:36*	WG2495536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/22/2025 11:49	WG2495730
Ethane	ND		13.0	1	04/22/2025 11:49	WG2495730
Ethene	ND		13.0	1	04/22/2025 11:49	WG2495730

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 04:32	WG2495789
Toluene	ND		1.00	1	04/21/2025 04:32	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 04:32	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 04:32	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 04:32	WG2495789
(S) Toluene-d8	*118*		*80.0-120*		*04/21/2025 04:32*	WG2495789
(S) 4-Bromofluorobenzene	*90.8*		*77.0-126*		*04/21/2025 04:32*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.6*		*70.0-130*		*04/21/2025 04:32*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/25/2025 12:45	WG2498000
Residual Range Organics (RRO)	ND		250	1	04/25/2025 12:45	WG2498000
(S) o-Terphenyl	*93.7*		*52.0-156*		*04/25/2025 12:45*	WG2498000

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	193000		20000	1	04/19/2025 09:17	WG2494627

Sample Narrative:
L1849608-03 WG2494627: Endpoint pH 4.5

Wet Chemistry by Method 300.0

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	119000		25000	5	04/23/2025 14:14	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Manganese,Dissolved	ND		10.0	1	04/25/2025 02:33	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	04/20/2025 17:59	WG2495536
(S) a,a,a-Trifluorotoluene(FID)	*99.2*		*78.0-120*		*04/20/2025 17:59*	WG2495536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	ND		10.0	1	04/22/2025 11:54	WG2495730
Ethane	ND		13.0	1	04/22/2025 11:54	WG2495730
Ethene	ND		13.0	1	04/22/2025 11:54	WG2495730

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		1.00	1	04/21/2025 04:52	WG2495789
Toluene	ND		1.00	1	04/21/2025 04:52	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 04:52	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 04:52	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 04:52	WG2495789
(S) Toluene-d8	*120*		*80.0-120*		*04/21/2025 04:52*	WG2495789
(S) 4-Bromofluorobenzene	*90.4*		*77.0-126*		*04/21/2025 04:52*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.2*		*70.0-130*		*04/21/2025 04:52*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		200	1	04/25/2025 13:05	WG2498000
Residual Range Organics (RRO)	ND		250	1	04/25/2025 13:05	WG2498000
(S) o-Terphenyl	*87.4*		*52.0-156*		*04/25/2025 13:05*	WG2498000

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	159000		20000	1	04/19/2025 10:36	WG2494632

Sample Narrative:
L1849608-04 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	109000		25000	5	04/23/2025 14:54	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 02:36	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/20/2025 18:21	WG2495536
(S) a,a,a-Trifluorotoluene(FID)	*99.4*		*78.0-120*		*04/20/2025 18:21*	WG2495536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 11:34	WG2496346
Ethane	ND		13.0	1	04/23/2025 11:34	WG2496346
Ethene	ND		13.0	1	04/23/2025 11:34	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 05:13	WG2495789
Toluene	ND		1.00	1	04/21/2025 05:13	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 05:13	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 05:13	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 05:13	WG2495789
(S) Toluene-d8	*121*	J1	*80.0-120*		*04/21/2025 05:13*	WG2495789
(S) 4-Bromofluorobenzene	*90.9*		*77.0-126*		*04/21/2025 05:13*	WG2495789
(S) 1,2-Dichloroethane-d4	*96.3*		*70.0-130*		*04/21/2025 05:13*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/25/2025 13:26	WG2498000
Residual Range Organics (RRO)	ND		250	1	04/25/2025 13:26	WG2498000
(S) o-Terphenyl	*52.6*		*52.0-156*		*04/25/2025 13:26*	WG2498000

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	199000		20000	1	04/19/2025 10:40	WG2494632

Sample Narrative:
L1849608-05 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	118000		25000	5	04/23/2025 15:07	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 02:38	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/20/2025 18:44	WG2495536
(S) a,a,a-Trifluorotoluene(FID)	*99.3*		*78.0-120*		*04/20/2025 18:44*	WG2495536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 15:17	WG2497385
Ethane	ND		13.0	1	04/23/2025 15:17	WG2497385
Ethene	ND		13.0	1	04/23/2025 15:17	WG2497385

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 05:33	WG2495789
Toluene	ND		1.00	1	04/21/2025 05:33	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 05:33	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 05:33	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 05:33	WG2495789
(S) Toluene-d8	*120*		*80.0-120*		*04/21/2025 05:33*	WG2495789
(S) 4-Bromofluorobenzene	*91.0*		*77.0-126*		*04/21/2025 05:33*	WG2495789
(S) 1,2-Dichloroethane-d4	*96.9*		*70.0-130*		*04/21/2025 05:33*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/25/2025 13:46	WG2498000
Residual Range Organics (RRO)	ND		250	1	04/25/2025 13:46	WG2498000
(S) o-Terphenyl	*87.4*		*52.0-156*		*04/25/2025 13:46*	WG2498000

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	203000		20000	1	04/19/2025 10:44	WG2494632

Sample Narrative:
L1849608-06 WG2494632: Endpoint pH 4.5

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	117000		25000	5	04/23/2025 15:23	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 02:41	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/20/2025 19:06	WG2495536
(S) a,a,a-Trifluorotoluene(FID)	*99.4*		*78.0-120*		*04/20/2025 19:06*	WG2495536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/22/2025 11:57	WG2495730
Ethane	ND		13.0	1	04/22/2025 11:57	WG2495730
Ethene	ND		13.0	1	04/22/2025 11:57	WG2495730

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 05:53	WG2495789
Toluene	ND		1.00	1	04/21/2025 05:53	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 05:53	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 05:53	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 05:53	WG2495789
(S) Toluene-d8	*121*	J1	*80.0-120*		*04/21/2025 05:53*	WG2495789
(S) 4-Bromofluorobenzene	*91.4*		*77.0-126*		*04/21/2025 05:53*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.1*		*70.0-130*		*04/21/2025 05:53*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/25/2025 14:06	WG2498000
Residual Range Organics (RRO)	ND		250	1	04/25/2025 14:06	WG2498000
(S) o-Terphenyl	*91.6*		*52.0-156*		*04/25/2025 14:06*	WG2498000

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	182000		20000	1	04/20/2025 12:50	WG2494851

Sample Narrative:

L1849608-07 WG2494851: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	120000		25000	5	04/23/2025 15:36	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 02:44	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/20/2025 19:29	WG2495536
(S) a,a,a-Trifluorotoluene(FID)	*99.4*		*78.0-120*		*04/20/2025 19:29*	WG2495536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 15:20	WG2497385
Ethane	ND		13.0	1	04/23/2025 15:20	WG2497385
Ethene	ND		13.0	1	04/23/2025 15:20	WG2497385

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 06:13	WG2495789
Toluene	ND		1.00	1	04/21/2025 06:13	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 06:13	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 06:13	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 06:13	WG2495789
(S) Toluene-d8	*121*	J1	*80.0-120*		*04/21/2025 06:13*	WG2495789
(S) 4-Bromofluorobenzene	*92.8*		*77.0-126*		*04/21/2025 06:13*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.4*		*70.0-130*		*04/21/2025 06:13*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/24/2025 17:35	WG2498001
Residual Range Organics (RRO)	ND		250	1	04/24/2025 17:35	WG2498001
(S) o-Terphenyl	*93.4*		*52.0-156*		*04/24/2025 17:35*	WG2498001

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	276000		20000	1	04/19/2025 10:48	WG2494632

Sample Narrative:
L1849608-08 WG2494632: Endpoint pH 4.5

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	108000		25000	5	04/23/2025 15:50	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	269		10.0	1	04/25/2025 02:47	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/20/2025 19:51	WG2495536
(S) a,a,a-Trifluorotoluene(FID)	*99.0*		*78.0-120*		*04/20/2025 19:51*	WG2495536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/22/2025 11:59	WG2495730
Ethane	ND		13.0	1	04/22/2025 11:59	WG2495730
Ethene	ND		13.0	1	04/22/2025 11:59	WG2495730

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 06:33	WG2495789
Toluene	ND		1.00	1	04/21/2025 06:33	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 06:33	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 06:33	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 06:33	WG2495789
(S) Toluene-d8	*119*		*80.0-120*		*04/21/2025 06:33*	WG2495789
(S) 4-Bromofluorobenzene	*91.3*		*77.0-126*		*04/21/2025 06:33*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.7*		*70.0-130*		*04/21/2025 06:33*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/24/2025 17:57	WG2498001
Residual Range Organics (RRO)	ND		250	1	04/24/2025 17:57	WG2498001
(S) o-Terphenyl	*98.4*		*52.0-156*		*04/24/2025 17:57*	WG2498001

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	363000		20000	1	04/19/2025 13:04	WG2494630

Sample Narrative:
L1849608-09 WG2494630: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	113000	J6	25000	5	04/23/2025 16:03	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	71.4	O1	10.0	1	04/25/2025 02:02	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 16:58	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 16:58*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	18.7		10.0	1	04/23/2025 11:44	WG2496346
Ethane	ND		13.0	1	04/23/2025 11:44	WG2496346
Ethene	ND		13.0	1	04/23/2025 11:44	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 06:53	WG2495789
Toluene	ND		1.00	1	04/21/2025 06:53	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 06:53	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 06:53	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 06:53	WG2495789
(S) Toluene-d8	*122*	J1	*80.0-120*		*04/21/2025 06:53*	WG2495789
(S) 4-Bromofluorobenzene	*90.3*		*77.0-126*		*04/21/2025 06:53*	WG2495789
(S) 1,2-Dichloroethane-d4	*94.3*		*70.0-130*		*04/21/2025 06:53*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	335		200	1	04/25/2025 10:08	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/25/2025 10:08	WG2498002
(S) o-Terphenyl	*103*		*52.0-156*		*04/25/2025 10:08*	WG2498002

Sample Narrative:
L1849608-09 WG2498002: Sample resembles laboratory standard for Hydraulic Fluid.

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	211000		20000	1	04/19/2025 10:51	WG2494632

Sample Narrative:
L1849608-10 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	119000		25000	5	04/23/2025 16:57	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 02:49	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 17:19	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 17:19*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/22/2025 12:02	WG2495730
Ethane	ND		13.0	1	04/22/2025 12:02	WG2495730
Ethene	ND		13.0	1	04/22/2025 12:02	WG2495730

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 07:13	WG2495789
Toluene	ND		1.00	1	04/21/2025 07:13	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 07:13	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 07:13	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 07:13	WG2495789
(S) Toluene-d8	*120*		*80.0-120*		*04/21/2025 07:13*	WG2495789
(S) 4-Bromofluorobenzene	*91.8*		*77.0-126*		*04/21/2025 07:13*	WG2495789
(S) 1,2-Dichloroethane-d4	*94.9*		*70.0-130*		*04/21/2025 07:13*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/25/2025 11:21	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/25/2025 11:21	WG2498002
(S) o-Terphenyl	*99.5*		*52.0-156*		*04/25/2025 11:21*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	205000		20000	1	04/19/2025 10:55	WG2494632

Sample Narrative:
L1849608-11 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	117000		25000	5	04/23/2025 17:10	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Manganese,Dissolved	ND		10.0	1	04/25/2025 02:52	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 17:41	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 17:41*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	ND		10.0	1	04/23/2025 11:52	WG2496346
Ethane	ND		13.0	1	04/23/2025 11:52	WG2496346
Ethene	ND		13.0	1	04/23/2025 11:52	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		1.00	1	04/21/2025 07:34	WG2495789
Toluene	ND		1.00	1	04/21/2025 07:34	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 07:34	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 07:34	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 07:34	WG2495789
(S) Toluene-d8	*120*		*80.0-120*		*04/21/2025 07:34*	WG2495789
(S) 4-Bromofluorobenzene	*91.5*		*77.0-126*		*04/21/2025 07:34*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.8*		*70.0-130*		*04/21/2025 07:34*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 15:05	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 15:05	WG2498002
(S) o-Terphenyl	*103*		*52.0-156*		*04/26/2025 15:05*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	205000		20000	1	04/19/2025 10:59	WG2494632

Sample Narrative:

L1849608-12 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	118000		25000	5	04/23/2025 17:23	WG2494549

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 02:55	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 18:02	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 18:02*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 11:57	WG2496346
Ethane	ND		13.0	1	04/23/2025 11:57	WG2496346
Ethene	ND		13.0	1	04/23/2025 11:57	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 07:54	WG2495789
Toluene	ND		1.00	1	04/21/2025 07:54	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 07:54	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 07:54	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 07:54	WG2495789
(S) Toluene-d8	*120*		*80.0-120*		*04/21/2025 07:54*	WG2495789
(S) 4-Bromofluorobenzene	*90.3*		*77.0-126*		*04/21/2025 07:54*	WG2495789
(S) 1,2-Dichloroethane-d4	*96.0*		*70.0-130*		*04/21/2025 07:54*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 15:29	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 15:29	WG2498002
(S) o-Terphenyl	*98.9*		*52.0-156*		*04/26/2025 15:29*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	345000		20000	1	04/19/2025 11:03	WG2494632

Sample Narrative:
L1849608-13 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	139000		50000	10	04/23/2025 02:51	WG2494612

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 03:03	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 18:23	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 18:23*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 11:59	WG2496346
Ethane	ND		13.0	1	04/23/2025 11:59	WG2496346
Ethene	ND		13.0	1	04/23/2025 11:59	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 08:14	WG2495789
Toluene	ND		1.00	1	04/21/2025 08:14	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 08:14	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 08:14	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 08:14	WG2495789
(S) Toluene-d8	*121*	J1	*80.0-120*		*04/21/2025 08:14*	WG2495789
(S) 4-Bromofluorobenzene	*91.1*		*77.0-126*		*04/21/2025 08:14*	WG2495789
(S) 1,2-Dichloroethane-d4	*94.5*		*70.0-130*		*04/21/2025 08:14*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	545		200	1	04/26/2025 15:54	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 15:54	WG2498002
(S) o-Terphenyl	*101*		*52.0-156*		*04/26/2025 15:54*	WG2498002

Sample Narrative:
L1849608-13 WG2498002: Sample resembles laboratory standard for Hydraulic Fluid.

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	209000		20000	1	04/20/2025 12:57	WG2494851

Sample Narrative:
L1849608-14 WG2494851: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	125000		25000	5	04/23/2025 03:05	WG2494612

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 03:06	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 18:45	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 18:45*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 12:02	WG2496346
Ethane	ND		13.0	1	04/23/2025 12:02	WG2496346
Ethene	ND		13.0	1	04/23/2025 12:02	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 08:34	WG2495789
Toluene	ND		1.00	1	04/21/2025 08:34	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 08:34	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 08:34	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 08:34	WG2495789
(S) Toluene-d8	*121*	J1	*80.0-120*		*04/21/2025 08:34*	WG2495789
(S) 4-Bromofluorobenzene	*92.9*		*77.0-126*		*04/21/2025 08:34*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.4*		*70.0-130*		*04/21/2025 08:34*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 16:18	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 16:18	WG2498002
(S) o-Terphenyl	*97.9*		*52.0-156*		*04/26/2025 16:18*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	393000		20000	1	04/19/2025 11:17	WG2494632

Sample Narrative:
L1849608-15 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	ND		250000	50	04/23/2025 03:18	WG2494612

Sample Narrative:
L1849608-15 WG2494612: Dilution due to matrix impact on instrumentation at lower dilution

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Manganese,Dissolved	ND		10.0	1	04/25/2025 03:08	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 19:06	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 19:06*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	273		10.0	1	04/23/2025 12:05	WG2496346
Ethane	ND		13.0	1	04/23/2025 12:05	WG2496346
Ethene	ND		13.0	1	04/23/2025 12:05	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		1.00	1	04/21/2025 08:54	WG2495789
Toluene	ND		1.00	1	04/21/2025 08:54	WG2495789
Ethylbenzene	1.21		1.00	1	04/21/2025 08:54	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 08:54	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 08:54	WG2495789
(S) Toluene-d8	*120*		*80.0-120*		*04/21/2025 08:54*	WG2495789
(S) 4-Bromofluorobenzene	*92.1*		*77.0-126*		*04/21/2025 08:54*	WG2495789
(S) 1,2-Dichloroethane-d4	*97.2*		*70.0-130*		*04/21/2025 08:54*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 16:42	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 16:42	WG2498002
(S) o-Terphenyl	*98.4*		*52.0-156*		*04/26/2025 16:42*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	198000		20000	1	04/19/2025 11:24	WG2494632

Sample Narrative:

L1849608-16 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	125000		25000	5	04/23/2025 03:31	WG2494612

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 03:11	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 19:28	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 19:28*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 12:11	WG2496346
Ethane	ND		13.0	1	04/23/2025 12:11	WG2496346
Ethene	ND		13.0	1	04/23/2025 12:11	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 09:15	WG2495789
Toluene	ND		1.00	1	04/21/2025 09:15	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 09:15	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 09:15	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 09:15	WG2495789
(S) Toluene-d8	*122*	J1	*80.0-120*		*04/21/2025 09:15*	WG2495789
(S) 4-Bromofluorobenzene	*92.8*		*77.0-126*		*04/21/2025 09:15*	WG2495789
(S) 1,2-Dichloroethane-d4	*96.8*		*70.0-130*		*04/21/2025 09:15*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 17:06	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 17:06	WG2498002
(S) o-Terphenyl	*100*		*52.0-156*		*04/26/2025 17:06*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	199000		20000	1	04/19/2025 11:28	WG2494632

Sample Narrative:

L1849608-17 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	128000		25000	5	04/23/2025 03:45	WG2494612

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/25/2025 03:14	WG2496283

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 19:49	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 19:49*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 12:13	WG2496346
Ethane	ND		13.0	1	04/23/2025 12:13	WG2496346
Ethene	ND		13.0	1	04/23/2025 12:13	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 09:35	WG2495789
Toluene	ND		1.00	1	04/21/2025 09:35	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 09:35	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 09:35	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 09:35	WG2495789
(S) Toluene-d8	*119*		*80.0-120*		*04/21/2025 09:35*	WG2495789
(S) 4-Bromofluorobenzene	*90.4*		*77.0-126*		*04/21/2025 09:35*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.1*		*70.0-130*		*04/21/2025 09:35*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 17:30	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 17:30	WG2498002
(S) o-Terphenyl	*97.9*		*52.0-156*		*04/26/2025 17:30*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	188000		20000	1	04/19/2025 13:11	WG2494630

Sample Narrative:
L1849608-18 WG2494630: Endpoint pH 4.5

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	122000		25000	5	04/23/2025 03:58	WG2494612

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/29/2025 11:42	WG2499696

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/21/2025 20:10	WG2496036
(S) a,a,a-Trifluorotoluene(FID)	*101*		*78.0-120*		*04/21/2025 20:10*	WG2496036

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/22/2025 12:07	WG2495730
Ethane	ND		13.0	1	04/22/2025 12:07	WG2495730
Ethene	ND		13.0	1	04/22/2025 12:07	WG2495730

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 09:55	WG2495789
Toluene	ND		1.00	1	04/21/2025 09:55	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 09:55	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 09:55	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 09:55	WG2495789
(S) Toluene-d8	*124*	J1	*80.0-120*		*04/21/2025 09:55*	WG2495789
(S) 4-Bromofluorobenzene	*93.8*		*77.0-126*		*04/21/2025 09:55*	WG2495789
(S) 1,2-Dichloroethane-d4	*95.4*		*70.0-130*		*04/21/2025 09:55*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 17:54	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 17:54	WG2498002
(S) o-Terphenyl	*95.3*		*52.0-156*		*04/26/2025 17:54*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	196000		20000	1	04/19/2025 11:32	WG2494632

Sample Narrative:

L1849608-19 WG2494632: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	125000		50000	10	04/23/2025 04:12	WG2494612

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/29/2025 11:49	WG2499696

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/22/2025 13:42	WG2496787
(S) a,a,a-Trifluorotoluene(FID)	*99.0*		*78.0-120*		*04/22/2025 13:42*	WG2496787

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/23/2025 12:16	WG2496346
Ethane	ND		13.0	1	04/23/2025 12:16	WG2496346
Ethene	ND		13.0	1	04/23/2025 12:16	WG2496346

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 10:15	WG2495789
Toluene	ND		1.00	1	04/21/2025 10:15	WG2495789
Ethylbenzene	ND		1.00	1	04/21/2025 10:15	WG2495789
Xylenes, Total	ND		3.00	1	04/21/2025 10:15	WG2495789
Naphthalene	ND		5.00	1	04/21/2025 10:15	WG2495789
(S) Toluene-d8	*121*	J1	*80.0-120*		*04/21/2025 10:15*	WG2495789
(S) 4-Bromofluorobenzene	*89.9*		*77.0-126*		*04/21/2025 10:15*	WG2495789
(S) 1,2-Dichloroethane-d4	*94.2*		*70.0-130*		*04/21/2025 10:15*	WG2495789

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 18:17	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 18:17	WG2498002
(S) o-Terphenyl	*98.9*		*52.0-156*		*04/26/2025 18:17*	WG2498002

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	196000		20000	1	04/19/2025 09:55	WG2494631

Sample Narrative:
L1849608-20 WG2494631: Endpoint pH 4.5 headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	122000		50000	10	04/23/2025 04:25	WG2494612

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Manganese,Dissolved	ND		10.0	1	04/29/2025 11:50	WG2499696

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/22/2025 17:27	WG2496787
(S) a,a,a-Trifluorotoluene(FID)	*99.1*		*78.0-120*		*04/22/2025 17:27*	WG2496787

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	04/22/2025 12:31	WG2495730
Ethane	ND		13.0	1	04/22/2025 12:31	WG2495730
Ethene	ND		13.0	1	04/22/2025 12:31	WG2495730

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 08:52	WG2495818
Toluene	ND		1.00	1	04/21/2025 08:52	WG2495818
Ethylbenzene	ND		1.00	1	04/21/2025 08:52	WG2495818
Xylenes, Total	ND		3.00	1	04/21/2025 08:52	WG2495818
Naphthalene	ND	J4	5.00	1	04/21/2025 08:52	WG2495818
(S) Toluene-d8	*114*		*80.0-120*		*04/21/2025 08:52*	WG2495818
(S) 4-Bromofluorobenzene	*91.5*		*77.0-126*		*04/21/2025 08:52*	WG2495818
(S) 1,2-Dichloroethane-d4	*112*		*70.0-130*		*04/21/2025 08:52*	WG2495818

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 18:41	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 18:41	WG2498002
(S) o-Terphenyl	*98.9*		*52.0-156*		*04/26/2025 18:41*	WG2498002

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/22/2025 11:51	WG2496787
(S) a,a,a-Trifluorotoluene(FID)	*99.1*		*78.0-120*		*04/22/2025 11:51*	WG2496787

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 03:02	WG2495818
Toluene	ND		1.00	1	04/21/2025 03:02	WG2495818
Ethylbenzene	ND		1.00	1	04/21/2025 03:02	WG2495818
Xylenes, Total	ND		3.00	1	04/21/2025 03:02	WG2495818
Naphthalene	ND	J4	5.00	1	04/21/2025 03:02	WG2495818
(S) Toluene-d8	*117*		*80.0-120*		*04/21/2025 03:02*	WG2495818
(S) 4-Bromofluorobenzene	*95.5*		*77.0-126*		*04/21/2025 03:02*	WG2495818
(S) 1,2-Dichloroethane-d4	*123*		*70.0-130*		*04/21/2025 03:02*	WG2495818

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	04/22/2025 12:13	WG2496787
(S) a,a,a-Trifluorotoluene(FID)	*99.4*		*78.0-120*		*04/22/2025 12:13*	WG2496787

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		1.00	1	04/21/2025 03:21	WG2495818
Toluene	ND		1.00	1	04/21/2025 03:21	WG2495818
Ethylbenzene	ND		1.00	1	04/21/2025 03:21	WG2495818
Xylenes, Total	ND		3.00	1	04/21/2025 03:21	WG2495818
Naphthalene	ND	J4	5.00	1	04/21/2025 03:21	WG2495818
(S) Toluene-d8	*114*		*80.0-120*		*04/21/2025 03:21*	WG2495818
(S) 4-Bromofluorobenzene	*92.4*		*77.0-126*		*04/21/2025 03:21*	WG2495818
(S) 1,2-Dichloroethane-d4	*123*		*70.0-130*		*04/21/2025 03:21*	WG2495818

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Gasoline Range Organics-NWTPH	ND		100	1	04/22/2025 12:35	WG2496787
(S) a,a,a-Trifluorotoluene(FID)	*98.9*		*78.0-120*		*04/22/2025 12:35*	WG2496787

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	04/21/2025 03:41	WG2495818
Toluene	ND		1.00	1	04/21/2025 03:41	WG2495818
Ethylbenzene	ND		1.00	1	04/21/2025 03:41	WG2495818
Xylenes, Total	ND		3.00	1	04/21/2025 03:41	WG2495818
Naphthalene	ND	J4	5.00	1	04/21/2025 03:41	WG2495818
(S) Toluene-d8	*114*		*80.0-120*		*04/21/2025 03:41*	WG2495818
(S) 4-Bromofluorobenzene	*92.4*		*77.0-126*		*04/21/2025 03:41*	WG2495818
(S) 1,2-Dichloroethane-d4	*120*		*70.0-130*		*04/21/2025 03:41*	WG2495818

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	ND		100	1	04/22/2025 13:20	WG2496787
(S) a,a,a-Trifluorotoluene(FID)	*99.3*		*78.0-120*		*04/22/2025 13:20*	WG2496787

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		1.00	1	04/21/2025 04:20	WG2495818
Toluene	ND		1.00	1	04/21/2025 04:20	WG2495818
Ethylbenzene	ND		1.00	1	04/21/2025 04:20	WG2495818
Xylenes, Total	ND		3.00	1	04/21/2025 04:20	WG2495818
Naphthalene	ND	J4	5.00	1	04/21/2025 04:20	WG2495818
(S) Toluene-d8	*116*		*80.0-120*		*04/21/2025 04:20*	WG2495818
(S) 4-Bromofluorobenzene	*94.0*		*77.0-126*		*04/21/2025 04:20*	WG2495818
(S) 1,2-Dichloroethane-d4	*120*		*70.0-130*		*04/21/2025 04:20*	WG2495818

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		200	1	04/26/2025 19:05	WG2498002
Residual Range Organics (RRO)	ND		250	1	04/26/2025 19:05	WG2498002
(S) o-Terphenyl	*97.9*		*52.0-156*		*04/26/2025 19:05*	WG2498002

Method Blank (MB)

(MB) R4202042-2 04/19/25 07:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		4750	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1849364-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1849364-01 04/19/25 07:41 • (DUP) R4202042-3 04/19/25 07:44

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	269000	270000	1	0.368		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5 headspace

L1849493-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1849493-14 04/19/25 09:02 • (DUP) R4202042-4 04/19/25 09:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	378000	381000	1	0.788		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5 headspace

Laboratory Control Sample (LCS)

(LCS) R4202042-1 04/19/25 07:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	99800	99.8	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4202054-2 04/19/25 10:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		4750	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1849493-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1849493-03 04/19/25 10:44 • (DUP) R4202054-4 04/19/25 10:50

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	322000	321000	1	0.518		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1849601-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1849601-04 04/19/25 12:50 • (DUP) R4202054-6 04/19/25 12:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	312000	316000	1	1.38		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4202054-1 04/19/25 10:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	99100	99.1	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4202053-2 04/19/25 07:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		4750	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

Method Blank (MB)

(MB) R4202053-4 04/19/25 07:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		4750	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1849493-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1849493-06 04/19/25 07:53 • (DUP) R4202053-6 04/19/25 07:59

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	312000	313000	1	0.172		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1849601-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1849601-07 04/19/25 09:29 • (DUP) R4202053-8 04/19/25 09:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	405000	391000	1	3.60		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4202053-1 04/19/25 07:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	99300	99.3	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4202049-2 04/19/25 09:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		4750	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1849493-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1849493-07 04/19/25 09:58 • (DUP) R4202049-4 04/19/25 10:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	456000	438000	1	4.00		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1849608-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1849608-15 04/19/25 11:17 • (DUP) R4202049-6 04/19/25 11:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	393000	400000	1	1.66		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4202049-1 04/19/25 09:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	100000	100	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4202351-2 04/20/25 11:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		4750	20000

Sample Narrative:
BLANK: Endpoint pH 4.5

L1849540-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1849540-01 04/20/25 11:45 • (DUP) R4202351-3 04/20/25 11:54

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	378000	377000	1	0.104		20

Sample Narrative:
OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

L1849718-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1849718-06 04/20/25 13:44 • (DUP) R4202351-4 04/20/25 13:51

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	339000	341000	1	0.573		20

Sample Narrative:
OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4202351-1 04/20/25 11:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	99200	99.2	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4204452-1 04/23/25 10:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		637	5000

L1849604-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1849604-01 04/23/25 12:00 • (DUP) R4204452-3 04/23/25 12:13

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	405000	405000	5	0.0903		15

L1849608-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1849608-09 04/23/25 16:03 • (DUP) R4204452-7 04/23/25 16:16

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	113000	111000	5	1.47		15

Laboratory Control Sample (LCS)

(LCS) R4204452-2 04/23/25 11:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	41400	104	90.0-110	

L1849604-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849604-01 04/23/25 12:00 • (MS) R4204452-4 04/23/25 12:26 • (MSD) R4204452-5 04/23/25 12:40

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	40000	405000	329000	327000	0.000	0.000	5	90.0-110	V	V	0.749	15

L1849608-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849608-09 04/23/25 16:03 • (MS) R4204452-8 04/23/25 16:30 • (MSD) R4204452-9 04/23/25 16:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	40000	113000	126000	125000	33.2	31.4	5	90.0-110	J6	J6	0.591	15

Method Blank (MB)

(MB) R4203826-1 04/23/25 02:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		637	5000

L1849614-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1849614-01 04/23/25 04:38 • (DUP) R4203826-3 04/23/25 04:52

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	24400	24700	1	1.30		15

L1849614-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1849614-02 04/23/25 05:32 • (DUP) R4203826-6 04/23/25 05:45

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	19100	19200	1	0.569		15

Laboratory Control Sample (LCS)

(LCS) R4203826-2 04/23/25 02:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	41900	105	90.0-110	

L1849614-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849614-01 04/23/25 04:38 • (MS) R4203826-4 04/23/25 05:05 • (MSD) R4203826-5 04/23/25 05:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	40000	24400	60500	61300	90.3	92.3	1	90.0-110			1.28	15

L1849614-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1849614-02 04/23/25 05:32 • (MS) R4203826-7 04/23/25 05:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	40000	19100	55500	91.0	1	90.0-110	

Method Blank (MB)

(MB) R4205113-1 04/25/25 01:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Manganese,Dissolved	U		1.01	10.0

Laboratory Control Sample (LCS)

(LCS) R4205113-2 04/25/25 02:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Manganese,Dissolved	1000	1020	102	80.0-120	

L1849608-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849608-09 04/25/25 02:02 • (MS) R4205113-4 04/25/25 02:08 • (MSD) R4205113-5 04/25/25 02:11

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Manganese,Dissolved	1000	71.4	1080	1070	101	100	1	75.0-125			0.926	20

Method Blank (MB)

(MB) R4207049-1 04/29/25 11:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Manganese,Dissolved	U		1.01	10.0

Laboratory Control Sample (LCS)

(LCS) R4207049-2 04/29/25 11:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Manganese,Dissolved	1000	1030	103	80.0-120	

L1849608-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849608-18 04/29/25 11:42 • (MS) R4207049-4 04/29/25 11:45 • (MSD) R4207049-5 04/29/25 11:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Manganese,Dissolved	1000	ND	1010	1020	101	102	1	75.0-125			0.958	20

Method Blank (MB)

(MB) R4202304-2 04/20/25 11:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	55.2	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*99.4*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R4202304-1 04/20/25 10:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5000	4960	99.2	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*78.0-120*	

Method Blank (MB)

(MB) R4202786-3 04/21/25 11:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	55.4	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4202786-1 04/21/25 10:08 • (LCSD) R4202786-2 04/21/25 10:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5000	4600	4610	92.0	92.2	70.0-124			0.217	20
(S) a,a,a-Trifluorotoluene(FID)				*102*	*102*	*78.0-120*				

L1849608-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849608-09 04/21/25 16:58 • (MS) R4202786-4 04/21/25 20:32 • (MSD) R4202786-5 04/21/25 20:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5000	ND	4860	4660	97.2	93.2	1	10.0-155			4.20	21
(S) a,a,a-Trifluorotoluene(FID)					*101*	*101*		*78.0-120*				

Method Blank (MB)

(MB) R4203449-3 04/22/25 10:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	46.3	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R4203449-1 04/22/25 08:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5000	4780	95.6	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*78.0-120*	

Method Blank (MB)

(MB) R4203181-2 04/22/25 09:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		5.10	10.0
Ethane	U		3.40	13.0
Ethene	U		3.40	13.0

L1849575-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1849575-01 04/22/25 09:21 • (DUP) R4203181-3 04/22/25 11:45

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20

L1849608-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1849608-02 04/22/25 11:49 • (DUP) R4203181-4 04/22/25 12:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4203181-1 04/22/25 09:05 • (LCSD) R4203181-5 04/22/25 12:58

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	71.4	68.8	105	101	85.0-115			3.71	20
Ethane	129	131	132	102	102	85.0-115			0.760	20
Ethene	127	128	129	101	102	85.0-115			0.778	20

Method Blank (MB)

(MB) R4203867-2 04/23/25 10:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		5.10	10.0
Ethane	U		3.40	13.0
Ethene	U		3.40	13.0

L1849373-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1849373-04 04/23/25 11:00 • (DUP) R4203867-3 04/23/25 11:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20

L1849608-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1849608-11 04/23/25 11:52 • (DUP) R4203867-4 04/23/25 12:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4203867-1 04/23/25 10:43 • (LCSD) R4203867-7 04/23/25 13:31

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.2	66.5	94.7	98.1	85.0-115			3.52	20
Ethane	129	123	121	95.3	93.8	85.0-115			1.64	20
Ethene	127	123	121	96.9	95.3	85.0-115			1.64	20

L1849608-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849608-09 04/23/25 11:44 • (MS) R4203867-5 04/23/25 13:21 • (MSD) R4203867-6 04/23/25 13:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methane	67.8	18.7	85.2	83.6	98.1	95.7	1	50.0-150			1.90	20
Ethane	129	ND	128	129	99.2	100	1	50.0-150			0.778	20
Ethene	127	ND	127	128	100	101	1	50.0-150			0.784	20

Method Blank (MB)

(MB) R4204000-2 04/23/25 13:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		5.10	10.0
Ethane	U		3.40	13.0
Ethene	U		3.40	13.0

L1849601-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1849601-04 04/23/25 14:27 • (DUP) R4204000-3 04/23/25 15:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20

L1849601-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1849601-11 04/23/25 15:05 • (DUP) R4204000-4 04/23/25 15:49

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4204000-1 04/23/25 13:37 • (LCSD) R4204000-5 04/23/25 16:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	64.4	66.4	95.0	97.9	85.0-115			3.06	20
Ethane	129	120	122	93.0	94.6	85.0-115			1.65	20
Ethene	127	120	123	94.5	96.9	85.0-115			2.47	20

Method Blank (MB)

(MB) R4204008-2 04/21/25 02:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Xylenes, Total	U		0.174	3.00
Naphthalene	U		1.00	5.00
(S) Toluene-d8	*123*	J1		*80.0-120*
(S) 4-Bromofluorobenzene	*91.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*94.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4204008-1 04/21/25 02:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	4.49	89.8	70.0-123	
Toluene	5.00	5.27	105	79.0-120	
Ethylbenzene	5.00	4.83	96.6	79.0-123	
Xylenes, Total	15.0	14.1	94.0	79.0-123	
Naphthalene	5.00	4.94	98.8	54.0-135	
(S) Toluene-d8			*117*	*80.0-120*	
(S) 4-Bromofluorobenzene			*91.6*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*97.2*	*70.0-130*	

L1849608-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849608-09 04/21/25 06:53 • (MS) R4204008-3 04/21/25 10:35 • (MSD) R4204008-4 04/21/25 10:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	ND	4.64	3.93	92.8	78.6	1	17.0-158			16.6	27
Toluene	5.00	ND	5.23	4.52	105	90.4	1	26.0-154			14.6	28
Ethylbenzene	5.00	ND	4.73	4.19	94.6	83.8	1	30.0-155			12.1	27
Xylenes, Total	15.0	ND	13.7	12.2	91.3	81.3	1	29.0-154			11.6	28
Naphthalene	5.00	ND	5.14	ND	103	87.0	1	12.0-156			16.6	35
(S) Toluene-d8					*114*	*116*		*80.0-120*				
(S) 4-Bromofluorobenzene					*90.3*	*92.3*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*98.5*	*98.3*		*70.0-130*				

Method Blank (MB)

(MB) R4203444-3 04/21/25 02:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Xylenes, Total	U		0.174	3.00
Naphthalene	U		1.00	5.00
(S) Toluene-d8	*112*			*80.0-120*
(S) 4-Bromofluorobenzene	*91.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4203444-1 04/21/25 00:46 • (LCSD) R4203444-2 04/21/25 01:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.82	4.94	96.4	98.8	70.0-123			2.46	20
Toluene	5.00	5.45	5.51	109	110	79.0-120			1.09	20
Ethylbenzene	5.00	4.60	4.87	92.0	97.4	79.0-123			5.70	20
Xylenes, Total	15.0	15.2	15.6	101	104	79.0-123			2.60	20
Naphthalene	5.00	5.77	6.94	115	139	54.0-135		J4	18.4	20
(S) Toluene-d8				*111*	*113*	*80.0-120*				
(S) 4-Bromofluorobenzene				*91.1*	*91.5*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*122*	*120*	*70.0-130*				

Method Blank (MB)

(MB) R4205335-1 04/25/25 09:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		60.5	200
Residual Range Organics (RRO)	U		77.2	250
(S) o-Terphenyl	*87.0*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4205335-2 04/25/25 09:24 • (LCSD) R4205335-3 04/25/25 09:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1640	1700	109	113	50.0-150			3.59	20
(S) o-Terphenyl				*101*	*109*	*52.0-156*				

Method Blank (MB)

(MB) R4204929-1 04/24/25 10:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		60.5	200
Residual Range Organics (RRO)	U		77.2	250
(S) o-Terphenyl	*86.0*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4204929-2 04/24/25 10:32 • (LCSD) R4204929-3 04/24/25 10:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1640	1680	109	112	50.0-150			2.41	20
(S) o-Terphenyl				*99.5*	*99.5*	*52.0-156*				

Method Blank (MB)

(MB) R4205346-1 04/25/25 09:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Diesel Range Organics (DRO)	U		60.5	200
Residual Range Organics (RRO)	U		77.2	250
(S) o-Terphenyl	*86.0*			*52.0-156*

Laboratory Control Sample (LCS)

(LCS) R4205346-2 04/25/25 09:43

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Diesel Range Organics (DRO)	1500	1660	111	50.0-150	
(S) o-Terphenyl			*93.5*	*52.0-156*	

L1849608-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1849608-09 04/25/25 10:08 • (MS) R4205346-3 04/25/25 10:32 • (MSD) R4205346-4 04/25/25 10:57

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Diesel Range Organics (DRO)	1500	335	2280	2240	130	127	1	50.0-150			1.77	20
(S) o-Terphenyl					*94.0*	*95.0*		*52.0-156*				

Sample Narrative:

OS: Sample resembles laboratory standard for Hydraulic Fluid.

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
AECOM - Portland, OR

888 SW 5th Ave
Suite 600
Portland. OR 97204

Billing Information:
Accounts Payable
888 SW 5th Ave
Suite 600
Portland, OR 97204

Pres Chk

Report to:
Ms. Nicky Moody 503-969-6310

Email To:
nicky.moody@aecom.com;christina.wheeler@a

Project Description:
Marathon Pasco Terminal - 1SA 2025

City/State Collected: Pasco WA

Please Circle: (PT) MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #
60746115

Lab Project #
AECOMPORSSA-CPL

Collected by (print):
Jackson Long

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day ___ STD TAT

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK,SULFATE 250mlHDPE-NoPres	MNDICP 250mlHDPE-NoPres	NWTPHDXLVINOSGT 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	NWTPHGX 40mlAmb-HCl-Blk	RSK175 40mlAmb HCl	V8260BTEXN 40mlAmb-HCl	V8260BTEXN 40mlAmb-HCl-Blk			Remarks	Sample # (lab only)
MW-02- 20250417	G	GW	77	4/17/25	0935	12	X	X	X	X		X	X					-01
MW-03- 20250415	G	GW	85	4/15/25	1455	12	X	X	X	X		X	X					-02
MW-04- 20250415	G	GW	75	4/15/25	0940	12	X	X	X	X		X	X					-03
MW-06- 20250416	G	GW	21	4/16/25	1220	12	X	X	X	X		X	X					-04
MW-07- 20250417	G	GW	72	4/17/25	1100	12	X	X	X	X		X	X					-05
MW-08- 20250415	G	GW	44	4/15/25	1655	12	X	X	X	X		X	X					-06
MW-10- 20250417	G	GW	68	4/17/25	0925	12	X	X	X	X		X	X					-07
MW-11- 20250415	G	GW	83	4/15/25	1450	12	X	X	X	X		X	X					-08
MW-12- 20250416	G	GW	83	4/16/25	1610	12	X	X	X	X		X	X					-09
MW-12 MS - 20250416	G	GW	83	4/16/25	1620	12	X	X	X	X		X	X					-09

Chain of Custody Page 1 of 3

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1491608
A063

Acctnum: **AECOMPORSSA**
Template:**T223778**
Prelogin: **P1141838**
PM: **034 - Craig Cothron**
PB:

Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:PO 1691898

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

	Date:	Time:		
Relinquished by : (Signature)	4/17/2025	1230	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR 6
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 27
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Devyani	Date: 4.18.25 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Company Name/Address:
AECOM - Portland, OR

888 SW 5th Ave
Suite 600
Portland, OR 97204

Billing Information:
Accounts Payable
888 SW 5th Ave
Suite 600
Portland, OR 97204

Pres Chk

Report to:
Ms. Nicky Moody 503-969-6310

Email To:
nicky.moody@aecom.com;christina.wheeler@a

Project Description:
Marathon Pasco Terminal - 1SA 2025

City/State Collected: Pasco WA

Please Circle: (PT) MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #
60746115

Lab Project #
AECOMPORSSA-CPL

Collected by (print):
Jackson Long

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day ___ STD TAT

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 2 of 3

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L849168

Table #

Acctnum: **AECOMPORSSA**
Template:**T223778**
Prelogin: **P1141838**
PM: **034 - Craig Cothron**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK,SULFATE 250mlHDPE-NoPres	MNDICP 250mlHDPE-NoPres	NWTPHDXLVINOSGT 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	NWTPHGX 40mlAmb-HCl-Blk	RSK175 40mlAmb HCl	V8260BTEXN 40mlAmb-HCl	V8260BTEXN 40mlAmb-HCl-Blk			Remarks	Sample # (lab only)
MW-12 MSD – 20250416	G	GW	83	4/16/25	1630	12	X	X	X	X		X	X					-09
MW-14- 20250415	G	GW	84	4/15/25	1650	12	X	X	X	X		X	X					-10
MW-15- 20250416	G	GW	21	4/16/25	1355	12	X	X	X	X		X	X					-11
MW-16- 20250416	G	GW	31	4/16/25	1045	12	X	X	X	X		X	X					-12
MW-17- 20250416	G	GW	84	4/16/25	1245	12	X	X	X	X		X	X					-13
MW-18- 20250416	G	GW	86.5	4/16/25	0920	12	X	X	X	X		X	X					-14
MW-19- 20250416	G	GW	85	4/16/25	1545	12	X	X	X	X		X	X					-15
MW-20- 20250416	G	GW	95	4/16/25	1710	12	X	X	X	X		X	X					-16
MW-21- 20250416	G	GW	93	4/16/25	1055	12	X	X	X	X		X	X					-17
MW-22- 20250415	G	GW	94	4/15/25	1210	12	X	X	X	X		X	X					-18

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:PO 1691898

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
	4/17/2025	1230		6	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 27	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4.18.25 Time: 0930	Hold: Condition: NCF / OK

Company Name/Address:
AECOM - Portland, OR

888 SW 5th Ave
Suite 600
Portland, OR 97204

Billing Information:
Accounts Payable
888 SW 5th Ave
Suite 600
Portland, OR 97204

Pres Chk

Report to:
Ms. Nicky Moody 503-969-6310

Email To:
nicky.moody@aecom.com;christina.wheeler@a

Project Description:
Marathon Pasco Terminal - 1SA 2025

City/State Collected: Pasco WA

Please Circle: (PT) MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #
60746115

Lab Project #
AECOMPORSSA-CPL

Collected by (print):
Jackson Long

Collected by (signature):

Site/Facility ID #

P.O. #

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day ___ STD TAT

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK,SULFATE 250mlHDPE-NoPres	MNDICP 250mlHDPE-NoPres	NWTPHDXLVINOSGT 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	NWTPHGX 40mlAmb-HCl-Blk	RSK175 40mlAmb HCl	V8260BTEXN 40mlAmb-HCl	V8260BTEXN 40mlAmb-HCl-Blk			Remarks	Sample # (lab only)
MW-23-20250416	G	GW	92	4/16/25	0915	12	X	X	X	X		X	X					-19
MW-04-DUP-20250415	G	GW	75	4/15/25	1000	12	X	X	X	X		X	X					-20
		GW				12	X	X	X	X		X	X					
TB-01	—	GW	—	4/17/25	1130	2					X			X				-21
TB-02	—	GW	—	4/17/25	1131	2					X			X				-22
TB-03	—	GW	—	4/17/25	1132	2					X			X				-23
FIELD BLANK	—	GW	—	4/17/25	1030	7			X	X			X					-24

Chain of Custody Page 3 of 3

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1849608

Table #

Acctnum: **AECOMPORSSA**
Template: **T223778**
Prelogin: **P1141838**
PM: **034 - Craig Cothron**
PB:

Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:PO 1691898

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No, HCl / MeoH, TBR	If preservation required by Login: Date/Time
	4/17/2025	1230		6	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 27	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4.18.25 Time: 0900	Hold: Condition: NCF / OK

Multiple Parcel Form

L# LR4916008

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
925709307118	TLA9	1.7	0.4	2.1	Yes / No / Not Present
425709307407	TLA9	5.4	0.4	5.8	Yes / No / Not Present
4257-0930 7092	TLA9	4.7	0.4	5.1	Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

D Dupont
Name

4.18.25
Date

ATTACHMENT D

Data Validation Report

AECOM
1111 3rd Ave
Suite 1600
Seattle, WA 98101
www.aecom.com

206 438 2700 tel
866 495 5288 fax

Memorandum

To	Nicky Moody, Project Manager	Info	DRAFT
Subject	Summary Data Quality Review Chevron Pipeline Company Pasco Bulk Terminal April 2025 Semi-Annual Groundwater Sampling		
From	Lucy Panteleeff, Chemist Christina Wheeler, Chemist		
Date	May 5, 2025		

The summary data quality review of 20 groundwater samples, 3 trip blanks and 1 field rinsate blank collected between April 15 and April 17, 2025, has been completed. The samples were analyzed at Pace Analytical National, LLC (Pace), located in Mount Juliet, Tennessee, for selected volatile organic compounds (VOCs) by EPA Method 8260D; total petroleum hydrocarbons (TPHs) by Washington State Department of Ecology (Ecology) Methods NWTPH-Gx (gasoline-range TPH) and NWTPH-Dx (diesel-range and heavy oil-range TPH); dissolved gases (methane, ethane, and ethene) by EPA Method RSK-175; dissolved manganese by EPA Method 6010D; sulfate by EPA Method 300.0; and/or total alkalinity by Standard Method (SM) 2320B-2011. The laboratory provided a standard report containing sample results and associated quality assurance (QA) and quality control (QC) data for all samples. For this report, the sample date suffixes (e.g. -20250415) will not be used unless needed for clarity. The following samples are associated with Pace laboratory group L1849608:

Sample ID	Laboratory ID	Requested Analyses
MW-02-20250417	L1849608-01	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-03-20250415	L1849608-02	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-04-20250415	L1849608-03	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-06-20250416	L1849608-04	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-07-20250417	L1849608-05	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-08-20250415	L1849608-06	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-10-20250417	L1849608-07	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-11-20250415	L1849608-08	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-12-20250416	L1849608-09	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-14-20250415	L1849608-10	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-15-20250416	L1849608-11	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-16-20250416	L1849608-12	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-17-20250416	L1849608-13	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-18-20250416	L1849608-14	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-19-20250416	L1849608-15	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-20-20250416	L1849608-16	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-21-20250416	L1849608-17	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-22-20250415	L1849608-18	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-23-20250416	L1849608-19	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
MW-04-DUP-20250415 [a]	L1849608-20	VOCs, TPH-Gx, Methane, TPH-Dx, Manganese, Sulfate, Alkalinity
TB-01-20250417	L1849608-21	VOCs, TPH-Gx
TB-02-20250417	L1849608-22	VOCs, TPH-Gx
TB-03-20250417	L1849608-23	VOCs, TPH-Gx
Field Blank-20250417	L1849608-24	VOCs, TPH-Gx, TPH-Dx

[a] Field duplicate of MW-04
TB – trip blank

Data were evaluated based on validation criteria established in the analytical methods, as well as *National Functional Guidelines for Organic Superfund Methods Data Review*, November 2020, and the *National Functional Guidelines for Inorganic Superfund Methods Data Review*, November 2020, as applied to the reported methodology.

AECOM

Summary Data Quality Review
Chevron Pipeline Company Pasco Bulk Terminal
April 2025 Semi-Annual Groundwater Sampling
Laboratory Group: L1849608

The following data components were reviewed during the limited data validation procedure for compliance with method specific or laboratory control charted criteria where appropriate: chain of custody forms, holding times, field/method/trip/instrument blanks, surrogate recoveries, matrix spike/matrix spike duplicate recoveries, laboratory and field duplicate results, laboratory control sample/laboratory control sample duplicate recoveries, reporting limits, and electronic data deliverables.

A summary of qualifiers that may be assigned to results in this laboratory group are included in Table 1. Qualifiers that may be assigned to results include:

- U - The analyte was analyzed for but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- DNR - Do Not Report. Another result is available that is more reliable or appropriate.

Sample Receipt

Upon receipt by the laboratory, the sample container information was compared to the chain-of-custody (COC), and the cooler temperatures were recorded. No discrepancies related to sample identification were noted by the laboratory and the coolers were received at temperatures within the EPA-recommended limits of greater than 0°C and less than or equal to 6°C.

Organic Analyses

Samples were analyzed for VOCs, TPHs, and/or dissolved gases by the methods identified in the introduction of this report.

1. Holding Times – Acceptable

2. Blanks – Acceptable except as noted below:

   Gasoline-range TPH by NWTPH-Gx – Gasoline-range TPH was detected at concentrations between the method detection limits (MDLs) and the reporting limits (RLs) in the method blanks associated with batches WG2495536 (55.2 ug/L), WG2496036 (55.4 ug/L), and WG2496787 (46.3 ug/L). Gasoline-range TPH was not detected in the samples associated with these method blanks; therefore, data were not qualified based on these method blank detections.

3. Surrogates – Acceptable except as noted below:

   VOCs by EPA 8260D – The percent recoveries for toluene-d8 in the following samples exceeded the control limits of 80.0-120%.

Sample	Recovery
MW-06	121%
MW-08	121%
MW-10	121%
MW-12	122%
MW-17	121%
MW-18	121%
MW-20	122%
MW-22	124%
MW-23	121%
MB (Batch WG2495789)	123%

MB – method blank

Data were not qualified based on surrogate recoveries in a QC sample (MB). VOCs were not detected in the samples listed in the table above; therefore, data were not qualified based on these surrogate exceedances.

4. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) – Acceptable except as noted below:

   VOCs by EPA 8260D – The percent recovery for naphthalene (139%) in the LCSD associated with batch WG2495818 exceeded the control limits of 54.0-135%. The percent recovery for the LCS and the relative percent difference (RPD) for the LCS/LCSD pair was acceptable; therefore, data were not qualified based on this LCSD result.

5. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable except as noted below:

   General – MS/MSDs for all organic analyses were performed using MW-12. Results for MW-12 were acceptable.

6. Laboratory Duplicate – Acceptable where applicable

   Dissolved Methane by EPA Method RSK-175 – Laboratory duplicates were performed using MW-03 and MW-15. Results were comparable.

7. Field Duplicate – Acceptable

   General – A field duplicate was submitted for MW-04 and identified as MW-104-DUP. Results were comparable.

8. Reporting Limits – Acceptable

9. Other Items of Note:

   Diesel Range and Residual Range Organics by NWTPH-Dx – The laboratory noted that the chromatographic patterns for MW-12 and MW-17 resembled hydraulic fluid. No data were qualified based on these qualitative observations.

AECOM

Summary Data Quality Review
Chevron Pipeline Company Pasco Bulk Terminal
April 2025 Semi-Annual Groundwater Sampling
Laboratory Group: L1849608

Dissolved Manganese

Samples were analyzed for dissolved manganese by EPA Method 6010D.

1. Holding Times – Acceptable

2. Blanks – Acceptable

3. Laboratory Control Sample (LCS) – Acceptable

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable

   MS/MSDs were performed using MW-12 and MW-22. Results were acceptable.

5. Field Duplicate – Acceptable

   A field duplicate was submitted for MW-04 and identified as MW-04-DUP. Results were comparable.

6. Reporting Limits – Acceptable

Conventional Analyses

Samples were analyzed for sulfate and alkalinity by the methods identified in the introduction of this report.

1. Holding Times – Acceptable

2. Blanks – Acceptable

3. Laboratory Control Sample (LCS) – Acceptable

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable where applicable

   Sulfate by EPA Method 300.0 – An MS/MSD was performed using MW-12. The percent recoveries for the MS (33.2%) and MSD (31.4%) were below the control limits of 90.0-110%. The result for sulfate in MW-12 was qualified as estimated and flagged 'J' based on the MS/MSD results.

5. Laboratory Duplicate – Acceptable

   Sulfate by EPA Method 300.0 – A laboratory duplicate was performed using MW-12. Results were comparable.

   Alkalinity by SM 2320B – A laboratory duplicate was performed using MW-19. Results were comparable.

6. Field Duplicate – Acceptable

   General – A field duplicate was submitted for MW-04 and identified as MW-04-DUP. Results were comparable.

7. Reporting Limits – Acceptable

8. Other Items of Note:

   Alkalinity by SM 2320B – The laboratory indicated the presence of headspace in MW-06, MW-07, MW-10, MW-12, MW-14, MW-16, MW-18, MW-19, MW-20, MW-21, MW-23, and MW-04-DUP. The method requires the absence of headspace in the sample containers; therefore, the results for alkalinity in these samples were qualified as estimated and flagged 'J' based on the presence of headspace.

Overall Assessment of Data

The data reported in this laboratory group, as qualified, are usable for meeting project objectives. The completeness for Pace laboratory group L1849608 is 100%.

AECOM

Summary Data Quality Review
Chevron Pipeline Company Pasco Bulk Terminal
April 2025 Semi-Annual Groundwater Sampling
Laboratory Group: L1849608

Table 1 – Summary of Qualified Data

Sample ID	Laboratory ID	Method	Analyte	Laboratory Result	Units	Final Result	Reason Code
MW-06	L1849608-04	SM2320B	Alkalinity	159000	ug/L	159000 J	hs
MW-07	L1849608-05	SM2320B	Alkalinity	199000	ug/L	199000 J	hs
MW-10	L1849608-07	SM2320B	Alkalinity	182000	ug/L	182000 J	hs
MW-12	L1849608-09	SM2320B	Alkalinity	363000	ug/L	363000 J	hs
MW-12	L1849608-09	E300.0	Sulfate	113000	ug/L	113000 J	m
MW-14	L1849608-10	SM2320B	Alkalinity	211000	ug/L	211000 J	hs
MW-16	L1849608-12	SM2320B	Alkalinity	205000	ug/L	205000 J	hs
MW-18	L1849608-14	SM2320B	Alkalinity	209000	ug/L	209000 J	hs
MW-19	L1849608-15	SM2320B	Alkalinity	393000	ug/L	393000 J	hs
MW-20	L1849608-16	SM2320B	Alkalinity	198000	ug/L	198000 J	hs
MW-21	L1849608-17	E300.0	Alkalinity	199000	ug/L	199000 J	hs
MW-22	L1849608-18	SM2320B	Alkalinity	188000	ug/L	188000 J	hs
MW-04-DUP	L1849608-20	SM2320B	Alkalinity	196000	ug/L	196000 J	hs

Notes:
hs – headspace
ID - identification
J – estimated value
m – matrix spike/matrix spike duplicate recovery
ug/L – microgram per liter